User's Guide

Wide Format Scanners

MODELS:

SD4410
SD4420
SD4430
SD4450
SD4490

Contents

About this Guide

This guide explains how to operate and maintain your wide format scanner.

The guide assumes basic knowledge of your computer and operating system and does not repeat material from their documentation.

Be sure to refer to:

1. The _Installation_ section – describes correct installation of your scanner drivers.
2. The readme.htm file in the ws folder on the _WIDEsystem TOOLS_ CD-ROM. Contains the most current installation and OS compatibility issues.
3. _WIDEsystem TOOLS Help_ – After installing your drivers, open WIDEsystem and press F1. Contains information on using the WIDEsystem application and Scanner Maintenance software.

This user's guide covers the following models:

Scanner Model	Description
SD4410	44" monochrome scanner
SD4420	44" color scanner
SD4430	44" color scanner
SD4450	44" color scanner
SD4490	44" color scanner

All above models are ENERGY STAR$^{®}$ compliant.

IMPORTANT: Be sure to use the WIDEsystem TOOLS CD-ROM that came with your scanner or a newer version. Out-of-date versions of WIDEsystem software may not detect your scanner model.

NOTE: Windows Compatibility - Your scanner and drivers are tested and developed to support the most current active Microsoft Windows version OS systems. Drivers and interface support in regard to specific Windows versions will follow the Microsoft Support Lifecycle Policy. The compatibility specifications can therefore change accordingly. The most current OS compatibility specifications and drivers will be available on your manufacturer's website.

Overview of the Scanner

Below: The parts, buttons and areas you need to recognize for using the scanner.

Scanner front view:

Release buttons for opening scanner lid (for maintenance)

Scanner lid

Insertion slot for document feeding

Operator's Panel

Scanner bed – paper feed area

Paper ready indicator   *Error indicator*   *Power button and indicator*

Paper forward button

Paper backwards button

One Touch buttons

Scanner rear view:

Release buttons for opening scanner lid (for maintenance)

Connection panel

USB interface connection

4 Diagnostic LEDS (for reporting to service provider)

Main power connection socket

Main power switch

Installation

Follow the steps below for quick and easy installation of your scanner and scanner drivers.

System requirements

- PC or supported workstation. Recommended requirements: Core 2 processor, 2 GB RAM, 5 GB of available hard drive space, USB 2.0 interface.
- Compatible Windows operating system – View the ws/readme.htm file on the *WIDEsystem TOOLS* CD-ROM.
- Enabled USB port on your PC.
- The *WIDEsystem TOOLS* CD supplied with your scanner.
- Scanning software and/or compatible third party software. *Read more »*
- Grounded power outlet.

Installation step by step

1 ## Set up the scan station

Your scanner should be placed either on the specially designed stand-alone floor stand or on a sturdy table. Make sure there is enough space behind the scanner to allow the media to run out.

⚠ *IMPORTANT*: DO NOT YET CONNECT THE SCANNER TO POWER OR PC.

⚠ See also the Safety Instructions at the end of this operator's guide

2 ## Install drivers and tools on your PC

⚠ *IMPORTANT*: You must install your scanner's drivers and tools before you connect the scanner or install any scanner software applications.

1. Insert the WIDEsystem TOOLS CD-ROM into your PC. Normally the setup program interface will start automatically. If it does not, locate the setup.exe file on the CD and start it manually.
2. Install *WIDEsystem*. Follow the installation guide on your screen. You will be asked to select your language and other important system preferences.
3. Install *Scanner Maintenance*. Follow the installation guide on your screen. You will be asked to select your language.
4. Remove the CD-ROM when installation is complete.

Installation

3 **Shut down the PC**

Your PC must be powered off before connection with the scanner.

4 **Disconnect the power plugs**

Disconnect the power plugs from the PC and the scanner.

⚠ **CAUTION**: This step is to ensure your own personal safety and to help protect your device from potential damage.
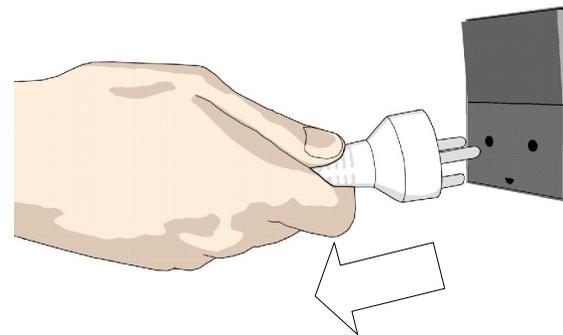
5 **Clean the scanner feeding bed**

This is the flat surface in front of the insertion slot. Wipe thoroughly so dirt and dust are not dragged into the scan area with the original.

6 **Open the scanner lid –**
Press the lid release buttons

The internal scan area should be wiped clean for any dust accumulated during packaging and shipping. The scan area is under the scanner lid so you have to open it. The scanner lid release buttons are at the back of the lid.

1. Stand at the front of the scanner.
2. Simultaneously slide the release buttons **towards the scanner's center** with your fingers until you feel them unlock.
3. Use your other fingers to grip the edge of the lid.

Installation

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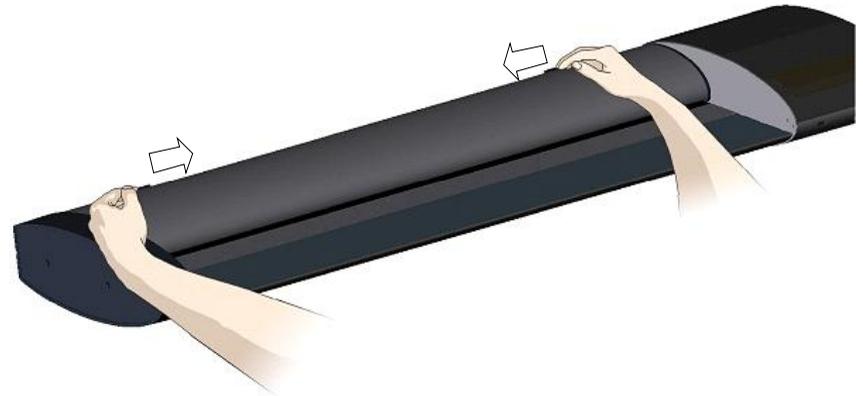
7 **Open the scanner lid – Pull the lid back**

Retain pressure on the lid release buttons and your grip on the lid edge as you pull the lid backwards towards your body. Open the scanner lid all the way back.

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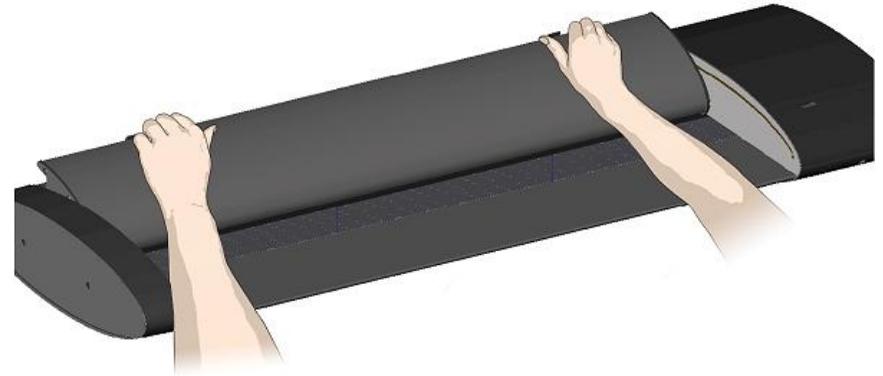
8 **Clean the internal scan area**

Wipe the internal scan area free of dust. Use a dry lint-free cloth.

If you detect smudges on the glass that cannot be wiped clean with a dry cloth, refer to this guide's section *Cleaning the scan area* for instructions on thoroughly cleaning the scan area in connection with scanner maintenance.

Installation

9 Connect the interface cable to the scanner

Connect the B-connector (square shaped end) to the USB connection socket on your scanner. The USB connection socket is at the scanner's back.
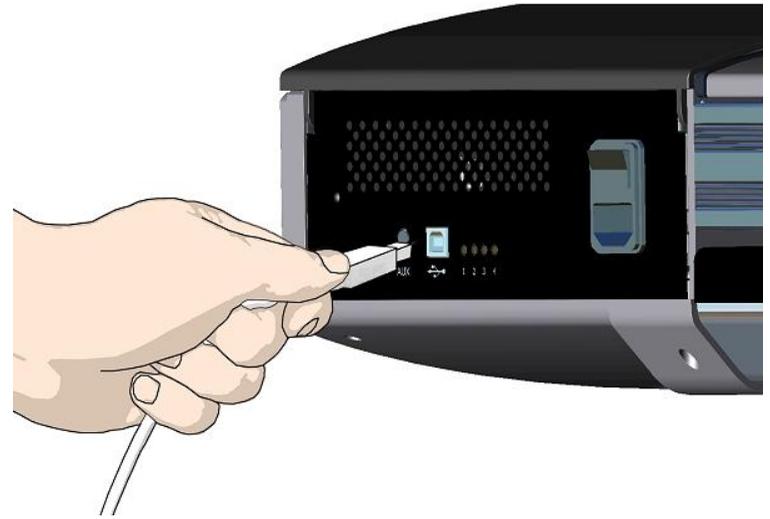
10 Connect the other end of the interface cable to the PC

Connect the A-connector end (flat end) to a USB port on your computer.

📝 **NOTE**: It is recommended to use an available USB port on the **back** of the PC. Using USB ports on the front can affect performance on some PC models.

Installation
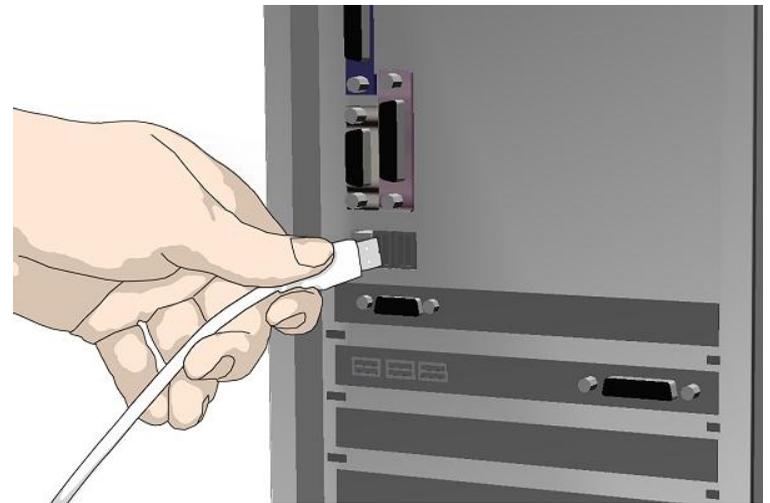
11

Connect the power cable to the scanner

Connect the scanner power cable to the scanner's main power connection socket. The main power connection socket is at the scanner's back.

12

Connect power to the wall outlet

Connect the other end of the scanner power cable to the power outlet.

⚠ **CAUTION**: The scanner is equipped with a three-wire (pin) grounding type plug. If you cannot insert the plug into your outlet, contact your electrician to replace the plug or outlet to ensure a grounded power connection. Do not try to defeat or ignore the purpose of the grounding-type plug.
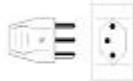
13 Turn on the scanner

Turn on the main power switch at the back of the scanner

14 Turn on your PC and start Windows

Windows will detect the new hardware (scanner) during startup and will prompt to load the necessary drivers that were installed in step 2.

Follow Windows' hardware installation instructions that appear on your screen.

15 Verify correct scanner installation

1. Locate the scanner icon 📷 on the Windows System Tray. This is the WIDEsystem program icon.

2. Double-left-click on the WIDEsystem program icon 📷.

3. Your scanner is installed and detected correctly if your scanner's name appears at the top of the WIDEsystem Status tab dialog.

4. If the scanner was not installed correctly, a message will inform you that your scanner could not be detected. If this is the case turn off power to all connected devices and repeat the installation steps.
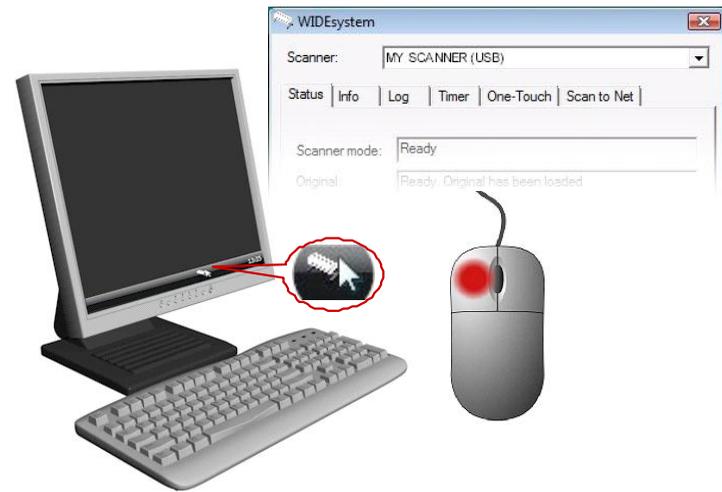
16 Install scan or copy software (optional)

Install the scan and copy software you will use with the scanner. There are many different scan and copy applications designed to run with your scanner and take advantage of its many features. Read more in Software applications for scanning.

17 Share the scanner on the LAN (optional)

You can enable other PCs on the LAN to use the scanner. This is called "Sharing". You can setup the scanner as a "shared scanner" through WIDEsystem.

1. Double-left-click on the WIDEsystem program icon 📇 and select the *Scan to Net* tab.

2. Locate the option group *Local scanner attached to this computer*.

3. Select the option: *Share your current scanner to allow others on the network to use it.*

4. Press the *OK* button to accept the settings.

On most LAN systems, this is all you have to do. However, some systems will require *Advanced* settings, such as specific communication port numbers. Contact your LAN administrator for information regarding *Advanced* settings.

📝 **NOTE:** Open WIDEsystem and press the <F1> key for viewing complete on-line help regarding the *Scan to Net* setup procedures and options.

📝 **NOTE:** PCs on the LAN that will use the scanner must be installed with WIDEsystem and compatible scan/copy software.
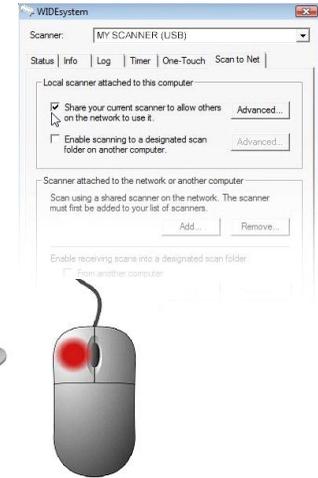
Turning the Scanner ON and OFF

Main power switch

The main power switch is at the back of the scanner. Press the upper half of the switch (marked "I") to turn the main power to ON. Press the lower half of the switch (marked "0") to turn the main power to OFF.
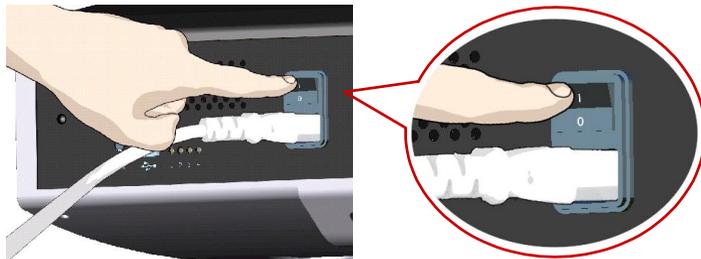
Main power switch is at the back of the scanner. Press "I" for ON and "0" for OFF.

Self test procedure
When you turn the main power ON, the scanner runs a short self-test procedure. This takes less than one minute. The 3 LEDs on the panel will be on during the self-test procedure.

All LEDs are on during self-test

Scanner ready to scan
The scanner is ready for scanning when the power LED turns green.   The scanner starts up in *Wake* mode (see next section).

Scanner ready – in Wake mode.

You can leave the main power switch permanently ON and control scanner power through its *Sleep* and *Wake* modes.

Sleep and wake modes

With the main power switch ON, scanner power can be set in *Sleep mode* and *Wake mode*. *Sleep* mode is the energy saving mode. The scanner cannot scan when in the *Sleep* mode. *Wake* mode is the full power ON mode for scanner operation.

The scanner will go from *Wake* mode into *Sleep* mode:
*   Automatically: after a set idle time (see Sleep mode options below).
*   Manually: when you hold the power button down for 3 seconds.
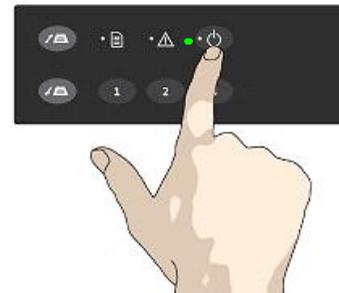
Hold down the power button to enter Sleep mode.
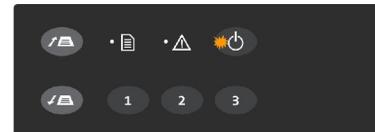
Scanner in Sleep mode – Power LED is orange

The scanner will go into *Wake* mode from *Sleep* mode:
*   When you feed a document into the scanner.
*   When you press the power button.

Scanner in Wake mode – Power LED is green

Sleep mode options - automatic entry and idle time

On delivery, the scanner is set for automatic entry into sleep mode after a preset *idle* time, i.e., the length of time the scanner is not active. You can prolong or shorten the idle time value to match your normal workflow.

To change/set the sleep mode options:

1. Double-left-click on the scanner icon in the system tray to open the WIDEsystem program.
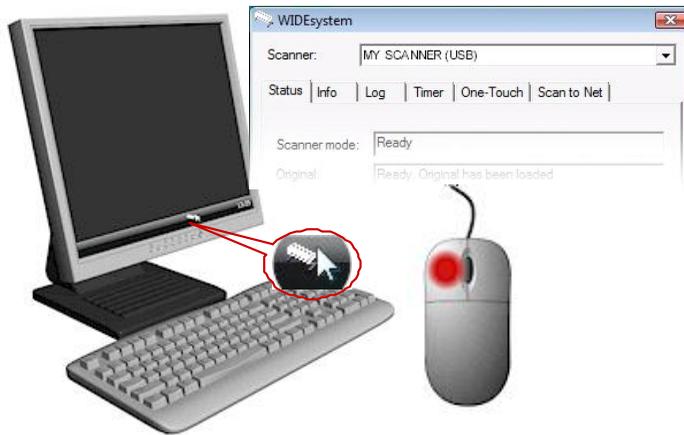
2. Select the *Timer* Tab.
3. Select or deselect the *Enter Sleep mode automatically* option.
4. If you do not select the *Enter Sleep mode automatically* option, you will need to use the manual method for entering sleep mode.
5. If you do select *Enter Sleep mode automatically* option, proceed to the next step to set the *Idle time* value.
6. Set the value *Idle time before entering sleep*. This is the number of minutes the scanner can stand idle before entering the sleep mode on its own.
7. Press *Apply* to download your settings into the scanner's memory.
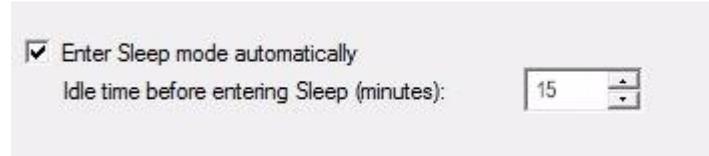
Sleep Mode options in the WIDEsystem program – Timer tab

 NOTE: With the scanner main power ON, the scanner can be also be brought into Wake-up and Sleep modes **manually** even while the *Enter sleep mode automatically* option is selected.

- **Wake** - by pressing any button on the panel or inserting a document for scanning.
- **Sleep** – by pressing and holding down the power button for 3 seconds.

You can choose to disable automatic entry into *Sleep mode* entirely if you want only manual activation of the sleep mode or, you can leave it enabled and retain both manual and automatic functions.

Loading Originals into the Scanner

Load, face up, at the scanner's center

Load your document with the image side facing upwards. Align the center of the document with the center arrow marking on the scanner bed.

Use the standard size markings to help align the document for a straight scan path.

You can use automatic loading or manual loading. These loading options are available in the scan/copy application.

NOTE: The availability of the *automatic* and *manual* loading options will depend on your scan/copy software and its level of compatibility with the scanner model.
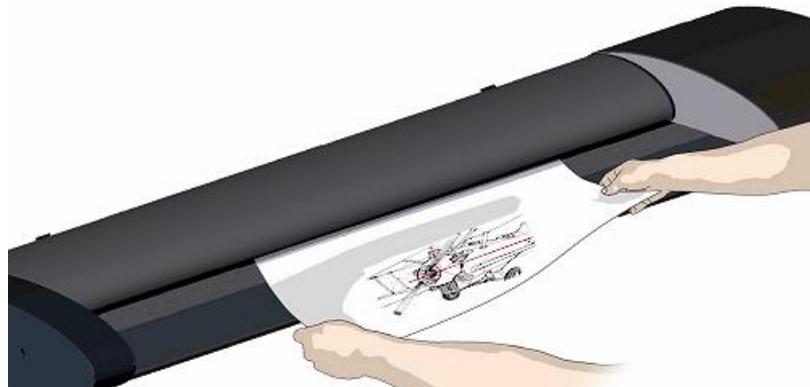
Load the paper, face up. Hold with both hands and align the document's center with the scanner center marking.

Automatic loading

With **automatic loading**, the scanner takes the original as soon as you insert it in the paper slot. Automatic loading is reliable for most jobs and especially useful for batch scanning jobs.
1. Make sure the Paper handling option "*Auto load*" is set in your scanning application.

2. Align the center of the document with the center arrow marking on the scanner bed.
3. Push the original into the insertion slot until you feel it contact the rollers and the Paper Ready LED lights green.

Paper Ready LED green just before the paper feeds

4. The scanner will grab the original automatically and move it into start-scan position.
5. A delay factor can be set in the scanning application. The delay will give you time to control straight positioning of the document if you feel the scanner is grabbing the original too fast.

Manual loading

1. Make sure the Paper handling option "*Manual*" is set in your scanning application.
2. Align the center of the document with the center arrow marking on the scanner bed.
3. Push the original into the insertion slot until you feel it contact the rollers and the Paper Ready LED lights green.
4. While holding the original in place with one hand, use the other hand to press and hold down the Paper Forward button on the scanner.
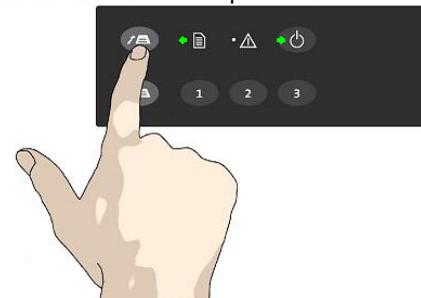

When Paper Ready LED green – press the Paper Forward button

5. The original moves into the start-scan position.

Unloading the original after scan

1. Press the Paper Backward button to eject the original back to the scanner feeding bed (towards you).
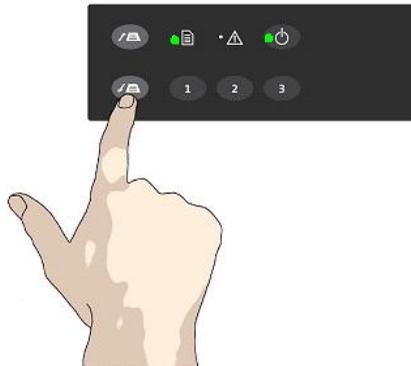
2. Press the Paper Forward button if you wish to eject the original out the back of the scanner.

Soft Handling

The *Soft-handling* option can be selected in your scan application. Soft-handling means that feeding and scanning are slowed down. You can use the option with both *Manual* and *Automatic* loading.

NOTE: The availability of the soft handling load option depends on your scan/copy software and its level of compatibility with the scanner model.

Use *Soft-handling* with
1. Old, curled or creased originals that trigger a paper jam. See Trouble Shooting – Paper Jam error for correcting a paper jam error.
2. Fragile originals you want passed delicately through the drive system.

Setting the input size

The *Input size* defines the scan area. You enter the input size in your application's input size dialogs.

NOTE: The availability of the *Input size* options described below will depend on your scan/copy software and its level of compatibility with the scanner model.

3 ways to set find and set the input size:

3. **Use automatic size detection -** The scanner will detect the edges of the document and calculate the input size for you.
4. **Set a standard size** - common standard sizes are marked on the scanner bed. Use these markings to determine which standard size matches the original and then select that size in the application's *input size* dialog.
5. **Set the size manually** for irregular sizes. Measure your document with the inch/cm ruler on the scanner bed. Enter your width measurement in the *width* setting field in your application's *input size* setup dialog. You can also measure and set a *length* value or choose automatic length detection.

Scanning

Software applications for scanning

Your scanner is controlled through scan, copy or imaging software installed on your PC.

Optimal full featured scanning functionality is obtainable through scan and copy software specifically developed for compatibility with your scanner model. See the scanner manufacturer's website for information on scanner software and compatible third-party applications.

Running applications from the scanner panel

Normally you would control the scanner from your PC through your scan software user interface. However, your scanner also supports one-touch buttons that enable you to trigger scanner compatible software from the scanner panel. Configuration of your one-touch buttons is controlled through WIDEsystem. Please refer to the on-line help in WIDEsystem and your compatible scanner software for instructions.
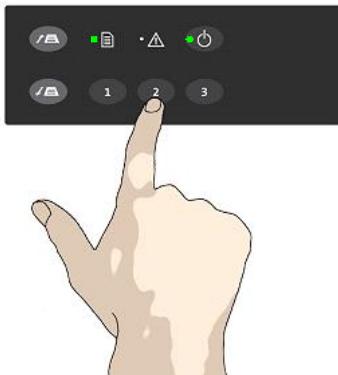
The one touch buttons 1, 2 and 3.

Batch scanning

Batch scanning involves jobs where you want to feed and scan a whole set of originals that require equal scan settings. The basic steps are:
1. Set your scan settings (size, type, image adjustments..) for the batch. Your settings will apply to ALL the documents in the batch.
2. Set the scan software into *Batch Mode*. This will tell the scanner to start scanning as soon as the document is fed so you don't need to trigger the scan.
3. Choose Automatic loading (optional) - for fast and effective loading.

Read you scan software's on-line help pages for specific information on batch scanning with the application.

NOTE: The availability of Batch scanning options will depend on your scan/copy software and its level of compatibility with the scanner model.

Monitoring your scanner with WIDEsystem

You installed WIDEsystem with the scanner drivers. WIDEsystem contains an application that monitors the scanner and reports on its functionality. *Double click the system tray's scanner icon to open the WIDEsystem control interface.*
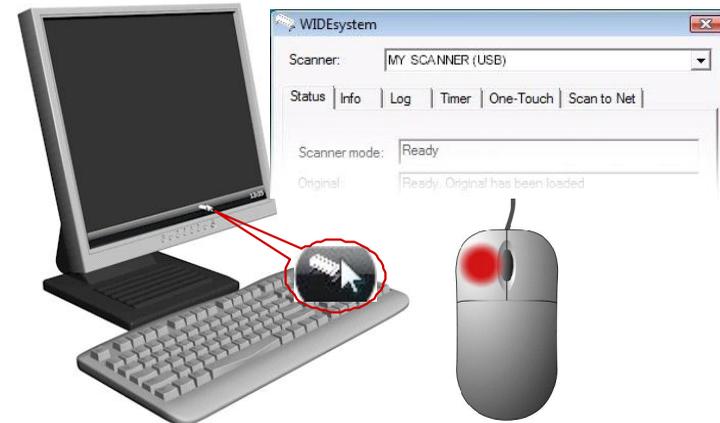
With WIDEsystem you can:

- **View the scanner's status.** Move the mouse over the scanner icon on the system tray. Status messages include whether or not the scanner is detected, connection and runtime errors and readiness for scanning.

Ready

13:35

Scanner status message on Windows system tray

- **View Error messages and logs.** Runtime errors are reported immediately on your screen. You can also open the *Status* tab and *Log* tab for viewing error messages.

- **View information about the scanner device** in relation to firmware and hardware revisions. Open the *Info* tab.

- **Install new firmware** – You download new firmware to a folder on your machine. Then right click on the scanner icon, select *Advanced Options > Update Scanner Firmware* to install it on your scanner.

- **Initiate a scan of the system's hardware bus** for re-establishing the interface. Right click on the scanner icon, select *Advanced Options > Rescan Hardware Bus*.

- **Assign/reassign applications to the scanner's one-touch-scan buttons**, or disable the one-touch-scan buttons altogether. Open the *One-Touch* tab to make settings.

- **Set up your scanner so it can be shared by other PC's on the network**. Open the *Scan to Net* tab to make settings. See also Installation - Share the scanner on the LAN.

- **Set up your scan software so it can access shared scanners on the network**. Open the *Scan to Net* tab to make settings.

- **Launch the scanner maintenance program.** Right click on the scanner icon, select *Launch Scanner Maintenance.*

- **Launch the WIDEsystem on-line help.** To find instructions on trouble shooting and using WIDEsystem with your scanner. Open WIDEsystem and press the F1 key.
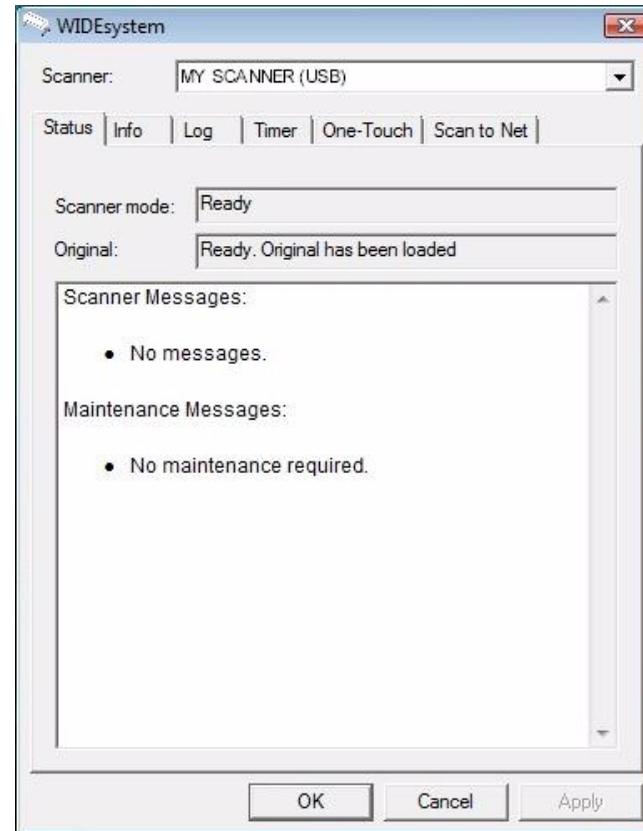
WIDEsystem program control interface

Maintenance

About scanner maintenance

Scanner maintenance will ensure optimal performance of your scanner. There are three basic maintenance tasks.

1. **Cleaning**
    Keep your scanner clean – the next section describes how to thoroughly clean the internal scan area. How often you need to clean will depend on how often and the types of media you scan. If your work primarily involves scanning newspapers and old blueprints you may need to clean more often than users who only scan brochures and new drawings. Be sure to clean the scanner when results are not optimal. Particles of dust in the scan area can sometimes be the sole cause of streaks in the end result.
    See more under the section Cleaning the scan area

2. **Calibration**
    Calibrate the scanner if your output is not optimal and cleaning (above) does not remedy the problem. Calibration will renew the scanner's original color and BW precision. Scanner Calibration is easy to perform. To run, you insert a Calibration Sheet, and start the Scanner Maintenance program. The rest is done by the program. Make sure the scanner is clean before calibrating.
    See more under the section Calibration – Scanner Maintenance program.

3. **Replacing the glass plate**
    This should be carried out when a worn glass plate affects your results. You may need a new glass plate if streaks still appear on the image even after cleaning the glass. See more under the section Replacing the glass plate.

Cleaning the scan area

How often you should clean your scanner will largely depend on how much you use the scanner and the condition of your documents. Generally, be sure to clean at least once a month and always right before important jobs that require a high degree of precision.

You must clean the following scanner parts/areas:

4. The scanner bed
5. Glass plate
6. Upper precision rollers
7. Lower pressure rollers
8. Lower rubber transport rollers

NOTE: To help locate these parts on the scanner, see the *Overview of key maintenance points – Cleaning* on the next page.

Overview - Key maintenance points - Cleaning

The illustration below shows the scanner from above with its lid open. The illustration indicates the key points (parts and areas) you need to recognize when cleaning the scanner. Instructions regarding the cleaning tasks that involve these points follow below.

Lower rubber transport rollers (black),   *Lower pressure rollers (long & white),*   *Upper precision rollers*

Opening lid to access scan area: *Lid latch lever*   *Glass plate*   *Scanner bed*   **Opening lid to access scan area**: *Lid latch lever*
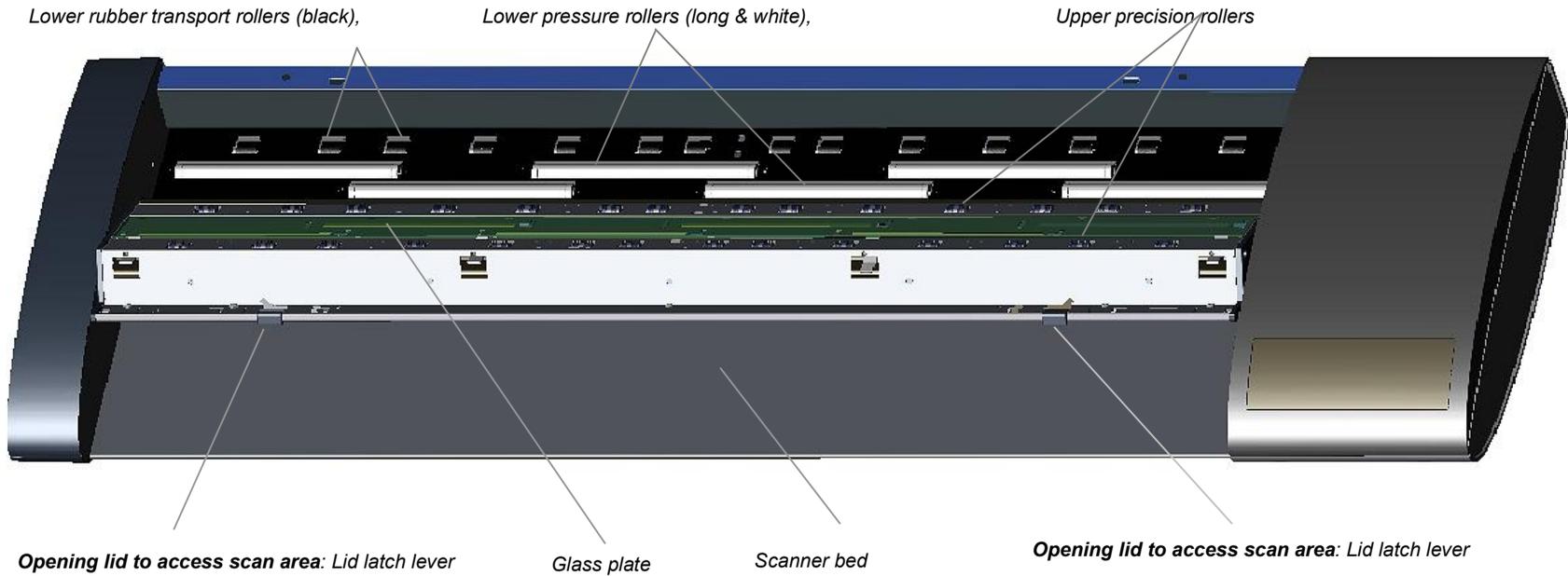
To clean your scanner:

1   Turn the main power to OFF

Press the main power switch at the back of the scanner to the OFF position ("0").
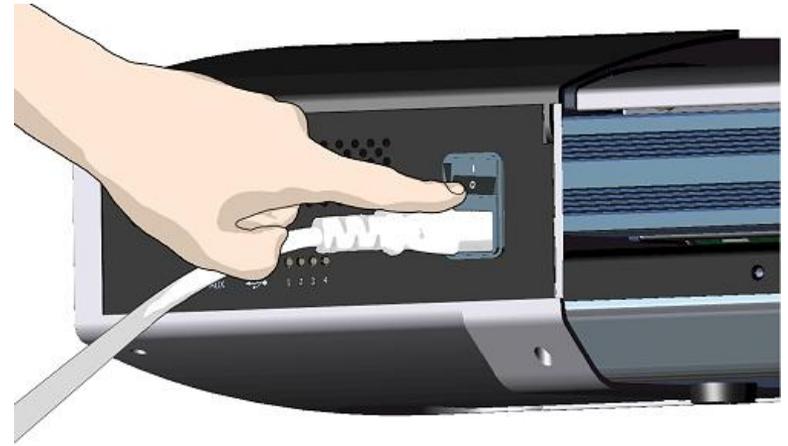
2   Disconnect the scanner's power plug

⚠️ **CAUTION**: Always disconnect power before cleaning the scanner. This step is to ensure your own personal safety and to help protect your device from potential damage.
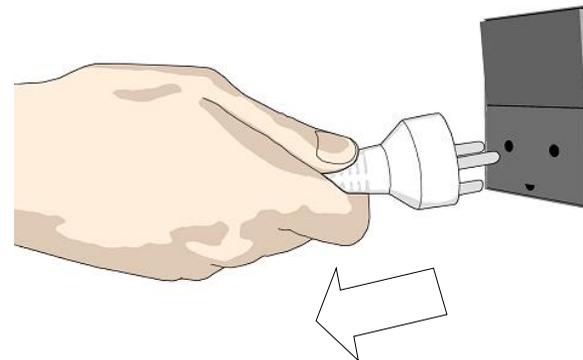
3 ## Clean the scanner surface

Clean your scanner's flat surface so dirt and dust are not dragged into the scan area with the original.
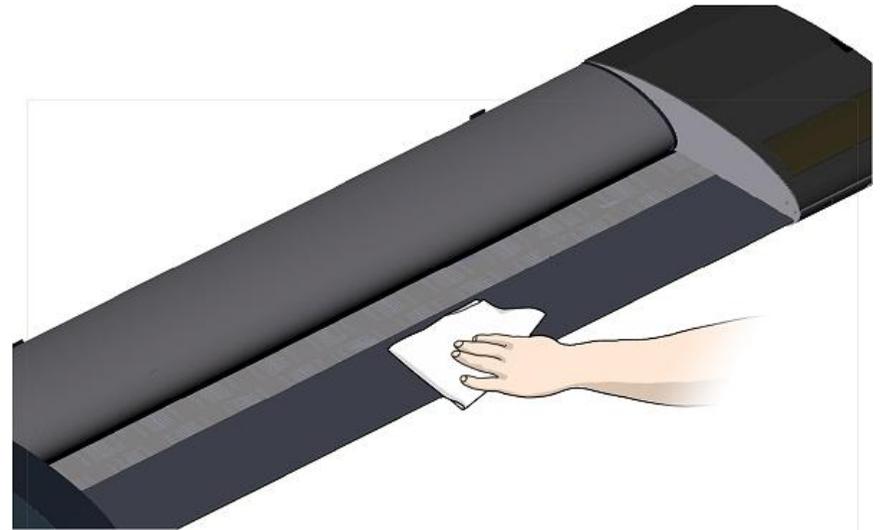
4 ## Open the scanner lid –
Press the lid release buttons

The next steps involve cleaning the scan area under the scanner lid so you have to open it. The scanner lid release buttons are at the back of the lid.

1. Stand at the front of the scanner.
2. Simultaneously slide the release buttons **towards the scanner's center** with your fingers until you feel them unlock.
3. Use your other fingers to grip the edge of the lid.

Maintenance

5 **Open the scanner lid – Pull the lid back**

Retain pressure on the lid release buttons and your grip on the lid edge as you pull the lid backwards towards your body. Open the scanner lid all the way back.
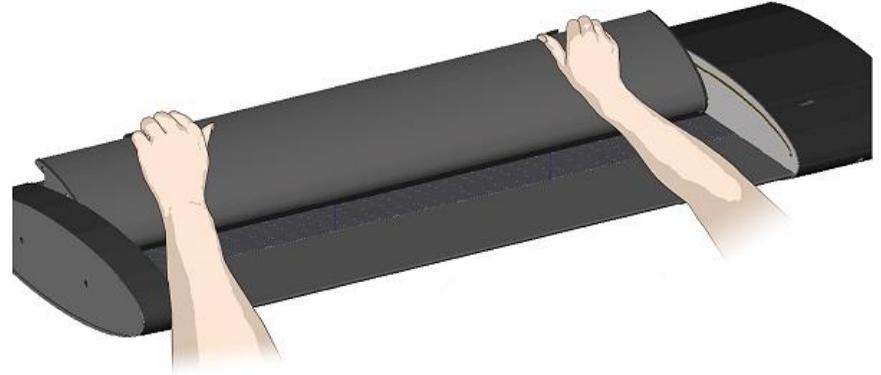
6 **Clean the scanner's glass plate**

Make sure you use 2 fresh and clean lint-free cloths for cleaning the glass plate. Do not reuse the cloth you used to wipe the scanner bed.

4. Spray/apply a mild, streak-free, glass cleaner onto a lint-free cloth.
5. Gently wipe the glass clean.
6. Dry the glass completely using the other clean, dry lint-free cloth.
7. Make sure that fluids to not get under the glass and that you leave the area dry.

⚠ **CAUTION**: Do not spray/apply cleaner fluids directly on the glass plate or anywhere else in the scan area.
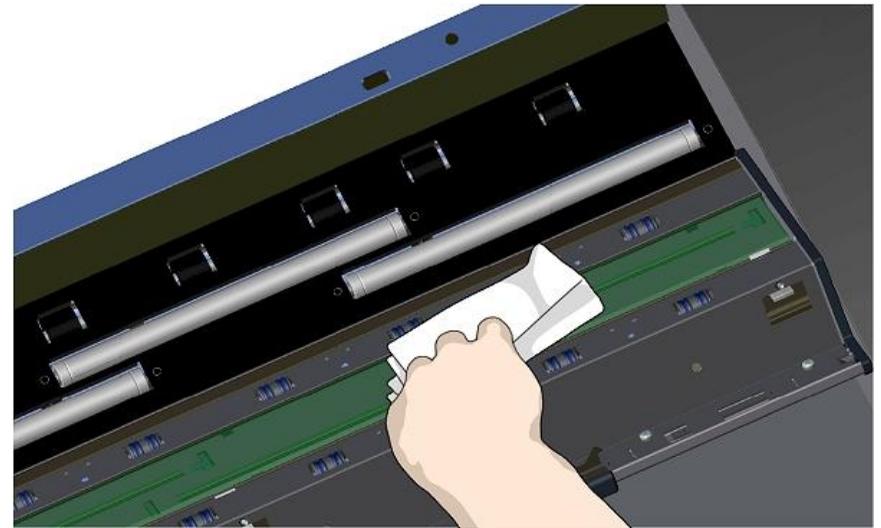
7 Clean the upper precision rollers

The upper precision rollers are in the lid, aligned in two rows on each side of the glass plate. Their function to keep the document on a straight path as it moves forward in the scanner. The upper precision rollers are in direct contact with the original's ink side and thus may require extra care when cleaning.

1. Spray/apply a mild, streak-free, glass cleaner onto a lint-free cloth.
2. Gently wipe the rollers surface.
3. Use the cloth to turn the rollers so you wipe all sides.
4. Dry the rollers completely using another clean, dry lint-free cloth.
5. Make sure that you leave the area dry.

⚠ **CAUTION**: Do not spray/apply cleaner fluids directly to the rollers or anywhere else in the scan area.

8 Clean the white pressure rollers

The white pressure rollers are the long rollers between the black transport rollers. They function to hold documents flat in the scanner.

6. Spray/apply a mild, streak-free, glass cleaner onto a lint-free cloth.
7. Gently wipe the white roller's surface.
8. Use the cloth to turn the rollers so you wipe all sides.
9. Dry the rollers completely using another clean, dry lint-free cloth.
10. Make sure that you leave the area dry.

⚠ **CAUTION**: Do not spray/apply cleaner fluids directly to the rollers or anywhere else in the scan area.
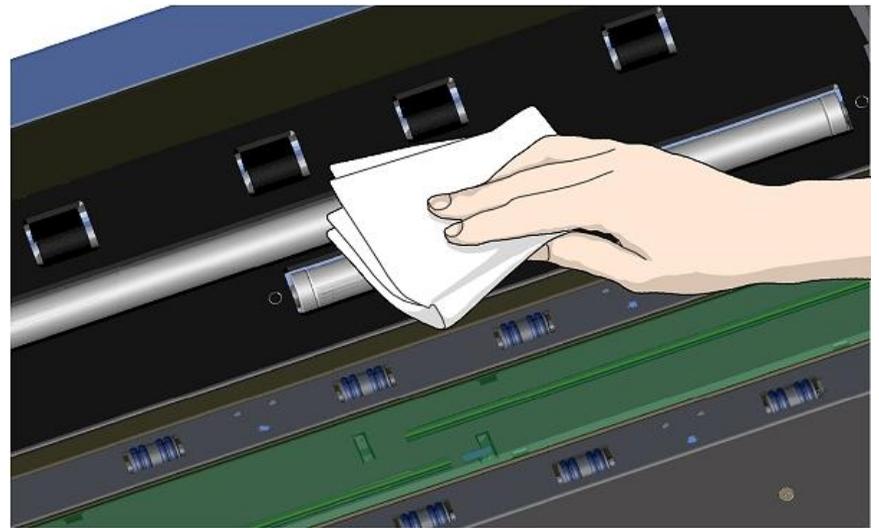
9　Clean the black transport rollers

The black transport rollers are placed in two rows on each side of the white pressure rollers. The black transport rollers are motorized and function to move the document through the scanner.

1. Spray/apply a mild, streak-free, glass cleaner onto a lint-free cloth.
2. Gently wipe the black roller's surface.
3. Use the cloth to turn the rollers so you wipe all sides. The rollers are all connected on the axels so you only need to turn one to turn them all.
4. Dry the rollers completely using another clean, dry lint-free cloth.
5. Make sure that you leave the area dry.

⚠ **CAUTION**: Do not spray/apply cleaner fluids directly to the rollers or anywhere else in the scan area.
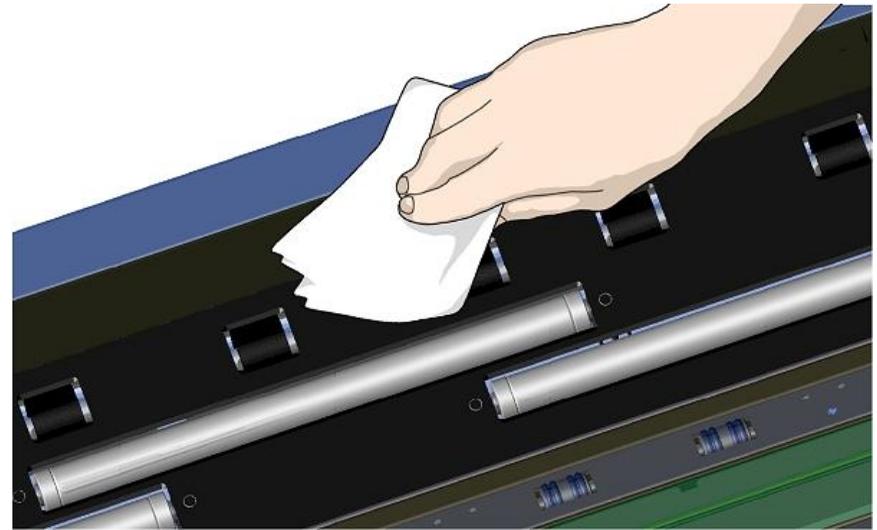
10　Close the lid

1. Close the scanner lid all the way down until you here the lid latches "click".
2. Gently try to pull open the lid to ensure it is locked in the "closed" position.
3. Plug in the scanner and turn the main power switch to ON.
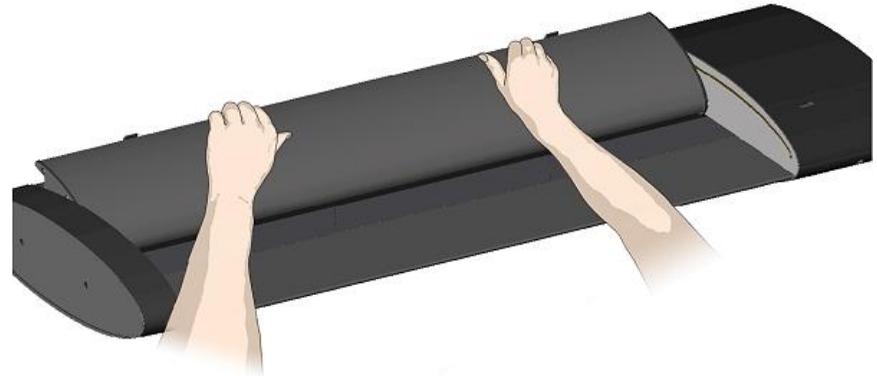
11 Your scanner is clean

You have completed the steps required for cleaning your scanner and the scan area.

Calibration - Scanner Maintenance program

Scanner calibration is very easy to perform with the *Scanner Maintenance* program you installed with your drivers. You just insert a calibration sheet, start the *Scanner Maintenance* program and let the wizard take over.

NOTE: Be sure to clean the scanner and scan area before calibrating.

To calibrate your scanner:

---

1 ### Turn the scanner power ON

If the main power is OFF, press the main power switch at the back of the scanner to the ON position. If the scanner is in *Sleep* mode, press any button to set it in *Wake mode*.

The scanner is ready for calibration when the power LED lights green.

---
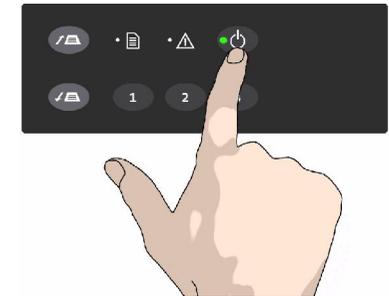
2 ### Launch the scanner maintenance program

1. On your PC - Right click on the WIDEsystem scanner icon.
2. Select Launch Scanner Maintenance to open the program's welcome dialog.
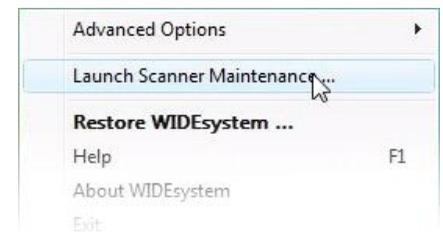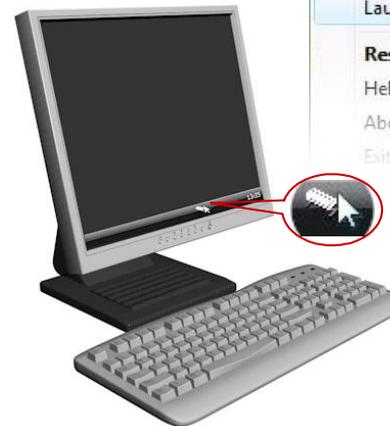
3

Follow the steps described by the wizard

The scanner maintenance wizard will guide you through the calibration steps.
Click the *Next* button in the welcome dialog to proceed.

4

Insert the calibration sheet

During the process, the wizard will ask you to insert the *Calibration Sheet* that came with your scanner. **The sheet's printed side must be inserted face up**. Align the sheet's midpoint arrow with the scanner's midpoint arrow and feed the sheet into the scanner.

Click the wizard's *Next* button to continue.

5 The program calibrates the scanner

The program works in steps to analyze and correct the status of the sensors, calibrate black and white values and calibrate color (on color scanners). The calibration sheet will be rescanned a number of times as the program processes data.

Let the program complete all calibration steps.

6 Finished

The wizard will tell you when the process is finished.

1. Remove the Scanner Calibration Sheet from the scanner.
2. Return the Scanner Calibration Sheet to its protective cover and then place it in the storage folder. Store the folder in a dry place and out of direct light.

Replacing the glass plate

Replacing the glass plate: Your documents move against the glass plate as they pass the scanner's sensors. After long-term use, the glass plate can become worn or scratched and this can affect image capture precision. Changing the glass will renew your scanner and ensure optimal results.

To replace a worn glass plate:

1 **Turn the main power to OFF**

Press the main power switch at the back of the scanner to the OFF position.
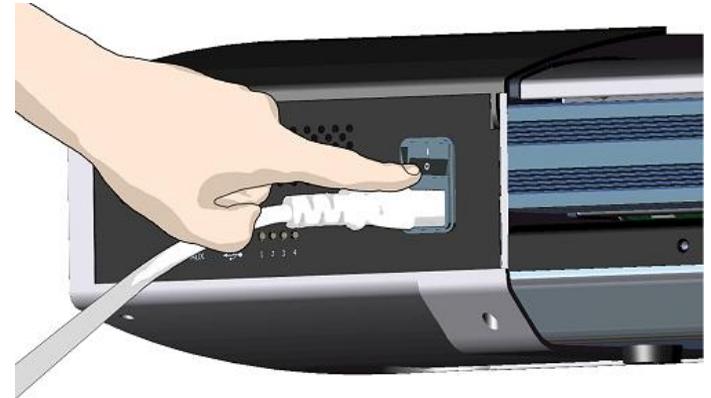
2 **Disconnect the scanner's power plug**

⚠ **CAUTION**: This step is to ensure your own personal safety and to help protect your device from potential damage.
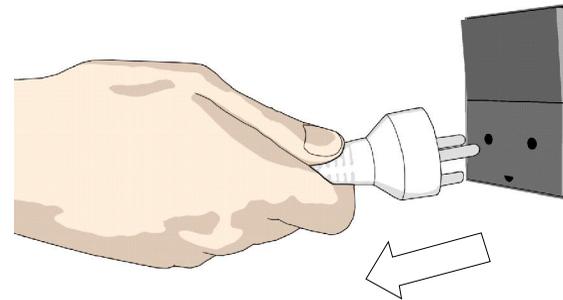
3   Open the scanner lid –
Press the lid release buttons

The glass plate is in the scan area under the scanner lid. You need to open the lid to replace it.

1. The scanner lid release buttons are at the back of the lid.
2. Stand at the front of the scanner.
3. Simultaneously slide the release buttons towards the scanner's center with your fingers until you feel them unlock. Use your other fingers to grip the edge of the lid.

4   Open the scanner lid – Pull the lid back

1. Retain pressure on the lid release buttons and your grip on the lid edge as you pull the lid backward towards your body.
2. Open the scanner lid all the way back.

You will need to locate and recognize the key parts you will use for replacing the glass plate. See the overview of key parts below.
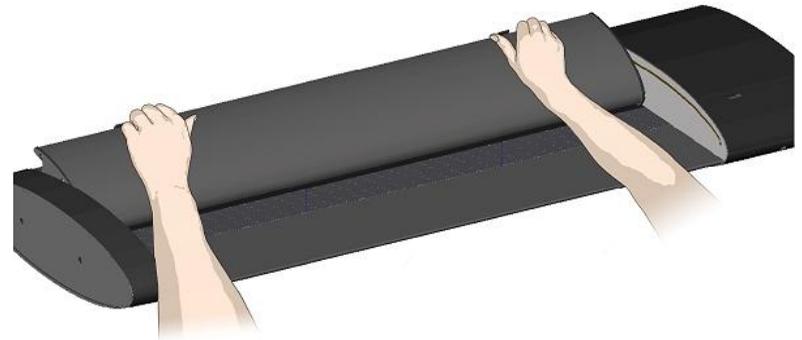
Replacing the glass plate – Overview of key parts

The illustration below shows the scanner from above with its lid open. The illustration indicates the key parts and buttons you need to recognize when replacing a worn glass plate.

The glass plate is held and locked in place with 4 small white-colored latches. Each latch can be released from the glass plate by pressing down on its corresponding latch release button. Each latch release button is placed in a square hole just under the latch it releases.

Glass plate   4 Glass plate latches (these hold the glass plate in place)

4 Glass plate latch release buttons in the square holes
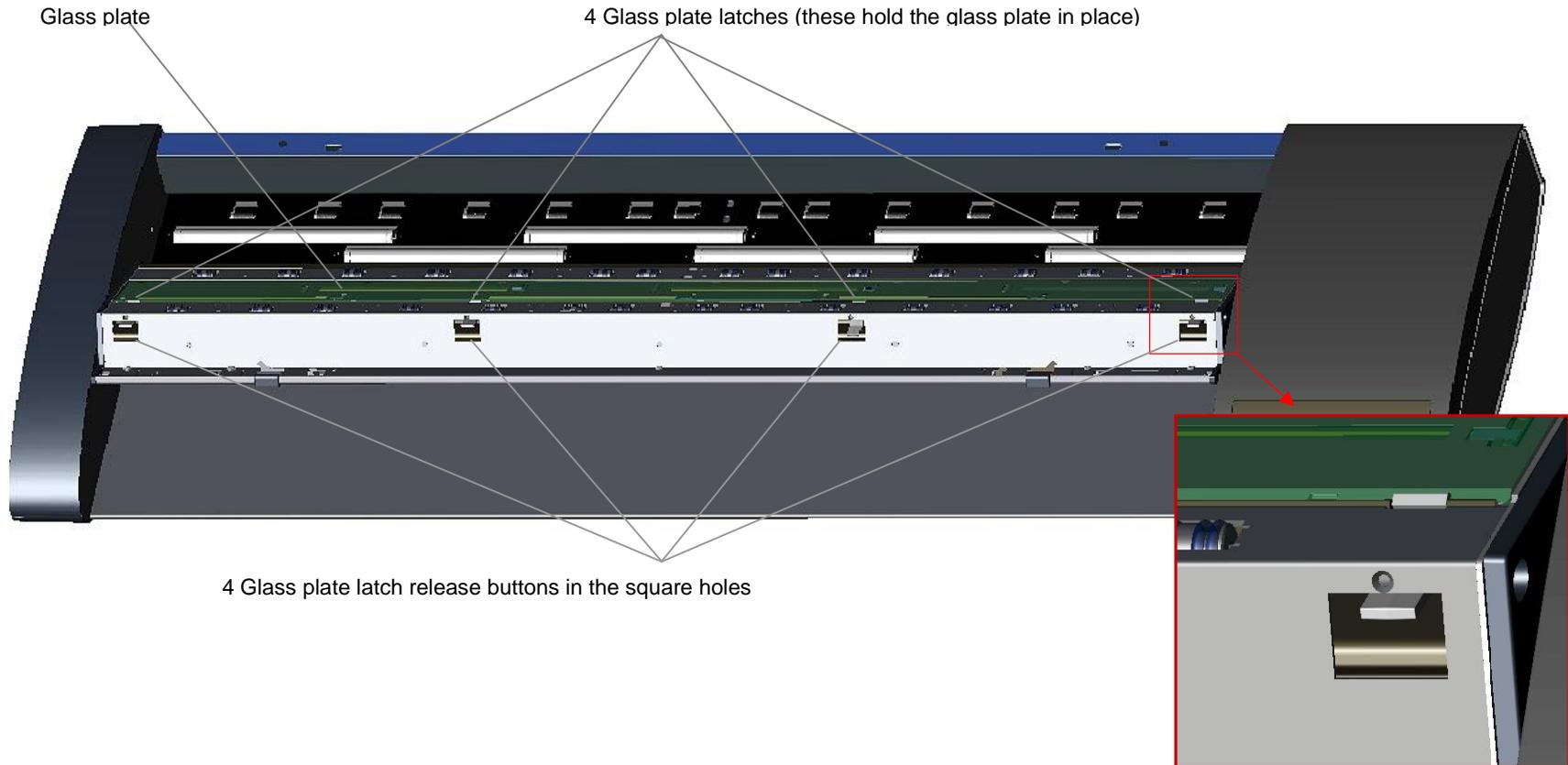
5

Detaching the glass plate – free the 1st latch

Stand at the front of the scanner. You start at the scanner's right side.

1. Detaching the first (rightmost) latch requires a sharp, flat tool such as a pen or a small screwdriver.

   NOTE: Detaching the remaining 3 latches will not require use of a tool.

2. Locate the **arrow label** at the scanner's right side.
3. Position the tool just under the glass plate edge where the arrow label indicates. At the same time; press down on the latch release button in the first (rightmost) square hole.
4. Carefully, use the tool to flip the edge of the glass upwards until it comes above and free of the white latch that held it down.
5. Release the latch release button.
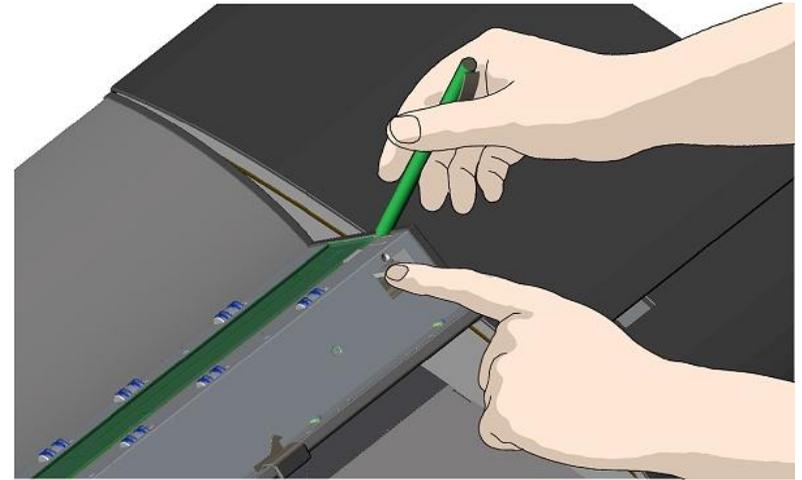
6

Detaching the glass plate – free the 2nd latch

After freeing the first latch in the previous step, freeing the remaining latches is easy.

1. Press down on the latch release button in the 2nd square hole from the right.
2. The 2nd latch will release its grip and the glass will pop up over the latch.
3. Let go of the latch release button.
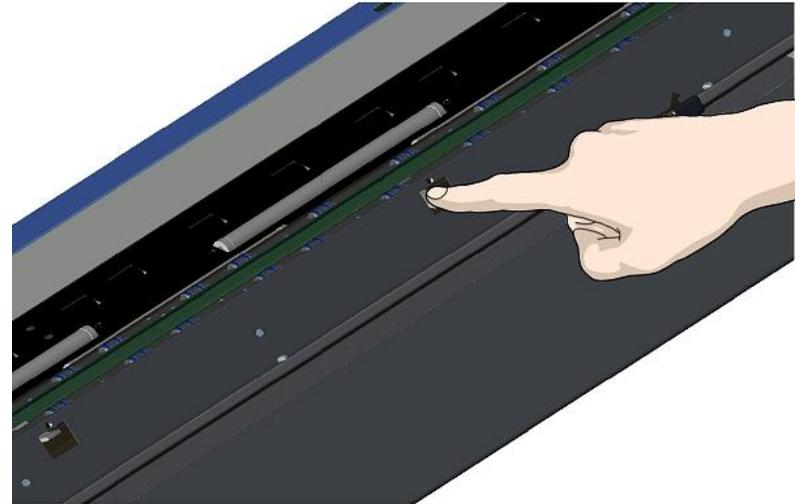
7 Detaching the glass plate – free the 3rd latch

1. Press down on the latch release button in the 3rd square hole from the right.
2. The 3rd latch will release its grip and the glass will pop up over the latch
3. Let go of the latch release button.
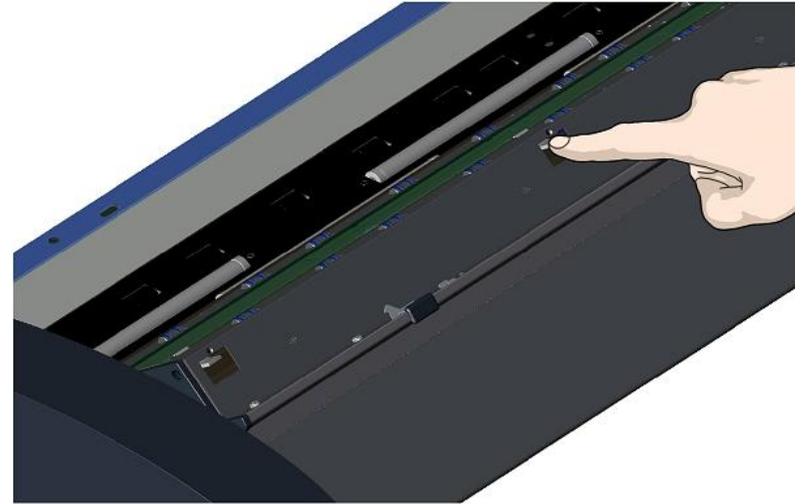
8 Detaching the glass plate – free the 4th latch

1. Press down on the latch release button in the 4th square hole from the right (leftmost hole).
2. The 4th latch will release its grip and the glass will pop up over the latch
3. Let go of the latch release button.
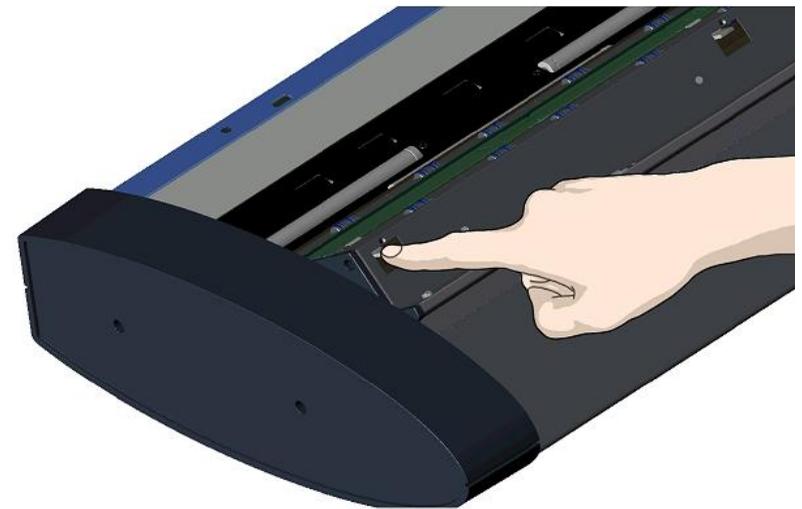
9 Detaching the glass plate –
Tip the glass plate edge upwards

After releasing all the latches, the glass plate is now free for removal.

1. Stand at the front side of the scanner.
2. Insert you thumbs under the glass plate edge around the middle area as shown in the illustration on the right.

    📝 **NOTE:** If you can't get your thumbs under the glass - use the sharp, flat tool from step 5 to tip the glass high enough to get a thumb underneath.
3. Tip the glass back and up so its two ends are free.
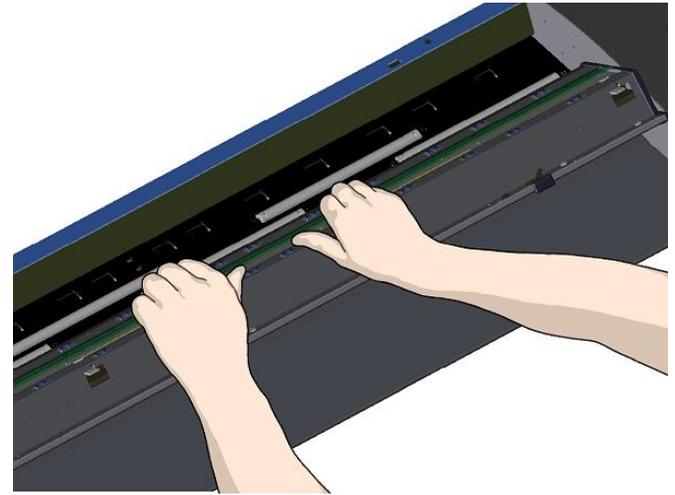
10 Detaching the glass plate –
Lift the glass plate edge out of the scanner

1. Move your hands, one at a time, to each end of the glass.
2. Apply light pressure with each hand as you lift the glass out of the scanner.

⚠️ **CAUTION**: The glass plate is long and thin and thus fragile. Take care not to break it.
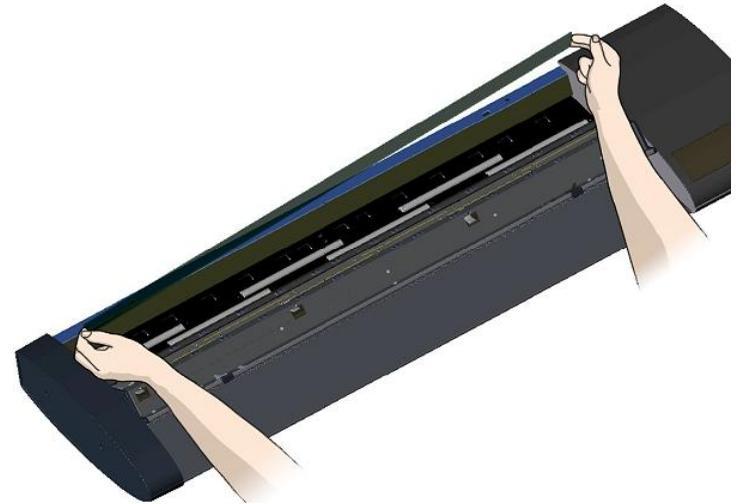
11 Insert a new glass plate –
lower a new glass plate into the scanner

1. Pick up the new glass plate in the same manner as you removed the old one - with two hands holding the glass on each end so you avoid touching the glass surface.

2. **Take special care** to avoid touching the glass plate's bottom surface which normally will not be cleaned during maintenance.

3. Stand at the front of the scanner as you hold the glass.

4. Make sure you hold the glass for insertion with the correct surface facing down. Note the direction of the facetted edges that indicate which is the bottom surface of the glass. See the illustration of the glass plate's profile below.

5. Hold the glass so that the bottom side surface faces your body as indicated in the glass plate's profile view below.

6. Lower the new glass plate into the scanner at an angle, as shown in the glass plate's profile view below, so that the glass's lower edge meets the scanner's bottom position groove (see next step).

⚠ **CAUTION**: The glass plate is long and thin and thus fragile. Take care not to break it.
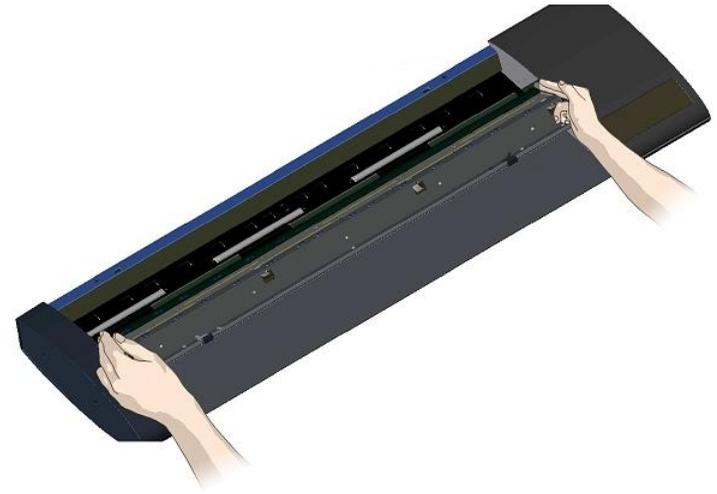
Glass Plate Profile View:

As you lower the glass plate into the scanner, hold it at an angle similar to that shown in the illustration:

Top surface of glass plate

Bottom surface of glass plate
(This side faces your body as you insert the glass plate)
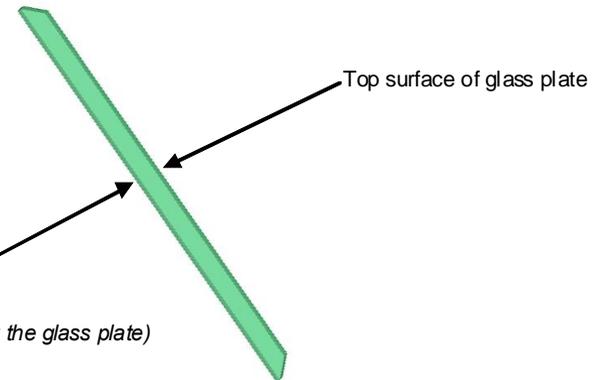
12 Insert a new glass plate –
fit into bottom position groove

1. The glass plate will rest in the scanner's lid between the bottom and top position grooves. Locate the glass plate's bottom position groove in the lid. This is the groove furthest from your body when you stand at the scanner's front.
2. Place the lower edge of the glass plate so it rests in the glass plate's bottom position groove.
3. Carefully tilt the upper edge (the edge closest to your body) down until the glass plate rests in the scanner lid between the 2 grooves (top/bottom position grooves).

Glass plate bottom position groove
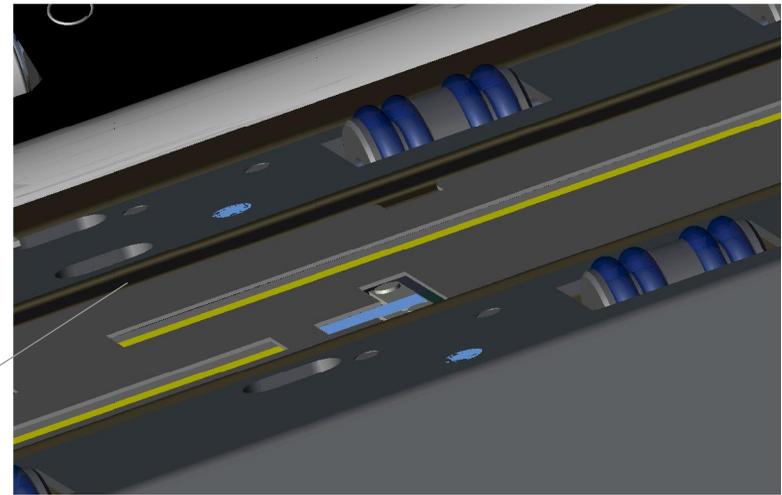
13 Lock the new glass plate in place

The glass needs to be locked in place with the four latches. At this point, the latches are under the glass plate and they need to be brought above so they grip the glass plate's edge.

1. Start at the right side.
2. Press down on the first (rightmost) latch release button.
3. With your other hand, press down on the glass plate near the latch so the glass plate's edge snaps down under the latch.
4. Repeat the process with the remaining three latches.
5. Ensure that all four latches are gripping the glass plate's edges.
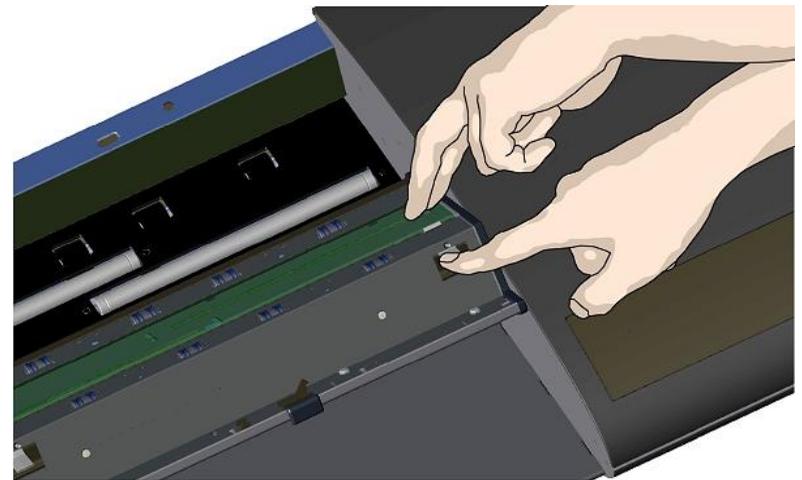
14 Clean the new glass plate

Make sure you use 2 fresh and clean lint-free cloths for cleaning your new glass plate.

1. Spray/apply a mild, streak-free, glass cleaner onto a lint-free cloth.
2. Gently wipe the glass clean. Look for fingerprints and smudges that may have been applied to the glass during replacement.
3. Dry the glass completely using the other clean, dry lint-free cloth.
4. Make sure that fluids to not get under the glass and that you leave the area dry.

⚠ **CAUTION**: Do not spray/apply cleaner fluids directly on the glass plate or anywhere else in the scan area.
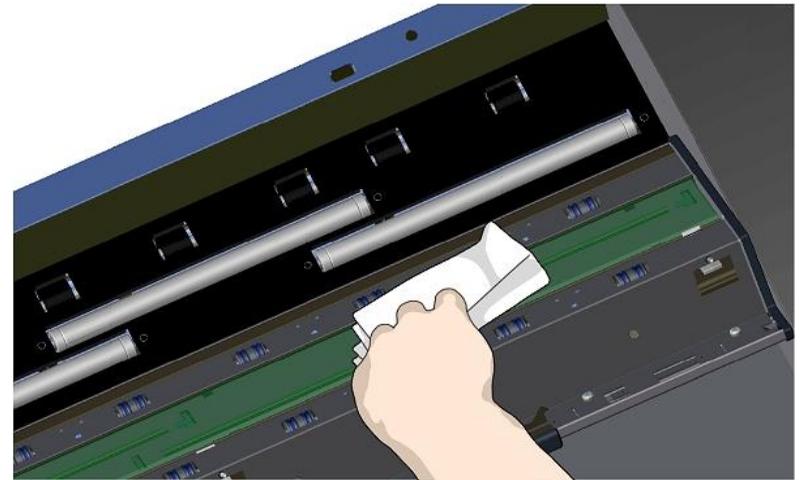
15 Glass plate replaced successfully

1. Close the scanner lid all the way down until you here the lid latches "click". Gently try to pull open the lid to ensure it is locked in the "closed" position.
2. Plug in the scanner and turn the main power switch to ON.

3. **NOTE:** If your results are not optimal after changing the glass plate, try to calibrate the scanner to tune it to its new glass plate.

Downloading new firmware

What is Firmware?

Like a computer, your scanner needs an operating system in order to work. This operating system is called "Firmware". Firmware runs inside the scanner and links its processors with the PC applications running the scanner.

When do I need new firmware?

Your scanner is shipped with the latest firmware available. You can afterwards upgrade your original firmware with newer firmware and continue to do so as they are released. Firmware upgrades can be downloaded from your manufacture's website or obtained through your dealer.

Upgrade your firmware when:
1. One or more new features are released or other improvements are made to the scanner though its firmware.
2. An error is discovered in the firmware version you have in the scanner and your manufacturer recommends installation of new firmware in which the error is corrected.

NOTE: Your manufacture's website specifies improvements with every new firmware release.

How to identify the firmware version running in the scanner?

1. Start WIDEsystem –Double-left-click on the system tray's scanner icon.
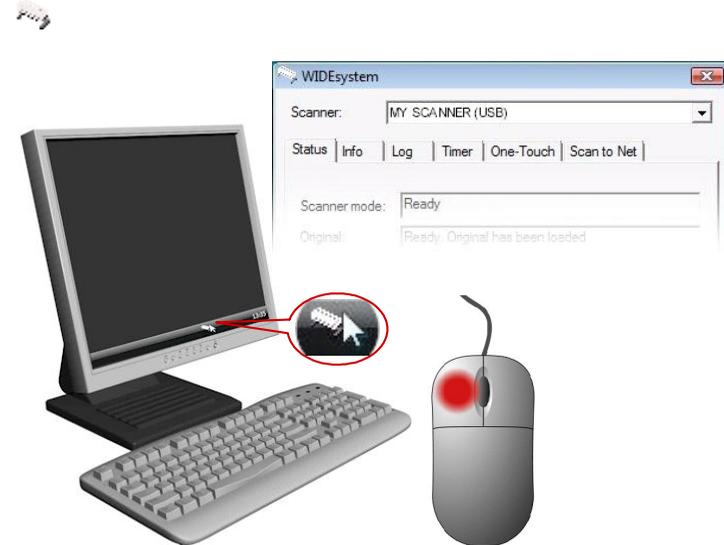
2. Select the *Info* tab.
3. The Info tab displays useful data about your scanner firmware.
4. *Firmware release* - Upgradeable firmware version.
5. *Firmware download time* - The date/time the current firmware was downloaded.

You can upgrade your firmware if the *Firmware Release* number is lower than the newest firmware version number on your manufacture's website.

How to install new firmware?

New firmware is installed by opening the firmware .exe file. The firmware .exe file must first reside on your machine. Select the Save target (or Save Link) option if downloading from the web.

To install the firmware file on your scanner:
1. Go to your manufacture's website and locate the new firmware for your scanner.
2. Download/save the firmware .exe file in a folder on your machine.
3. Start WIDEsystem's Quick menu - Right-click the scanner icon in the system tray.
4. Select Advanced Options.
5. Select Update Scanner Firmware

6. Browse the folders on your machine and find the firmware .exe file you wish to apply.
7. Select the firmware file and select *OK* to install. Installation can take up to 1 minute depending on the scanner model and firmware version. The WIDEsystem scanner icon on your system tray blinks red during the download process.
8. Follow the instructions on your screen.
9. If there were errors or power failures during firmware installation, reboot in Safe mode and reinstall the firmware. See more in *trouble shooting - frmware upgrade failure*.
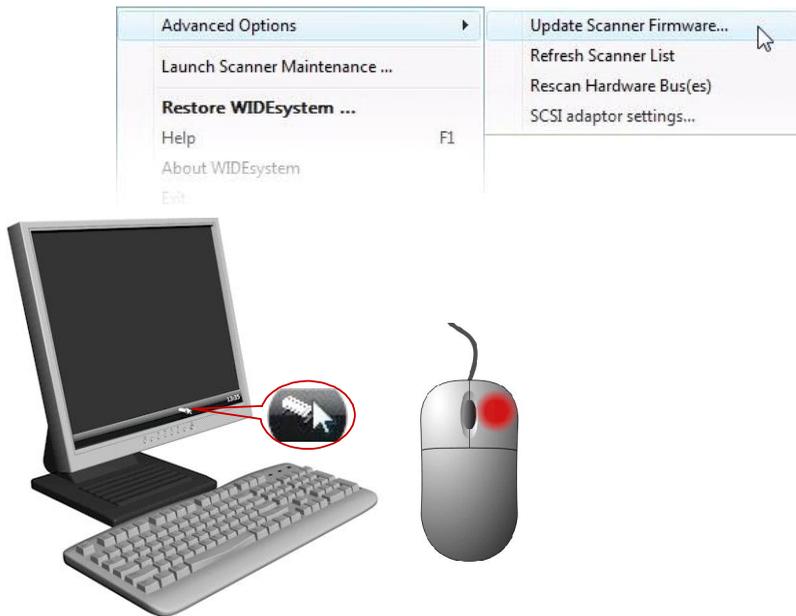
Trouble Shooting

This section describes trouble-shooting procedures for the most common issues that can arise with your scanner. Please look for a problem description that matches your actual situation. If found, perform the recommended trouble-shooting procedures before requesting a service call.

How are errors reported on your system

The scanner panel's *Error Indicator* will blink when the scanner detects an error. WIDEsystem will report the nature of the error on your screen.
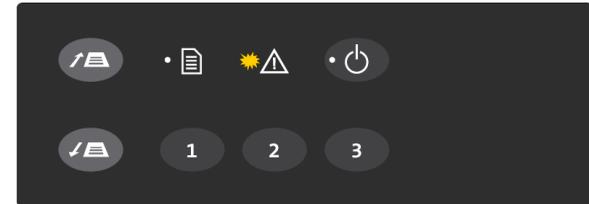
Error detected - Error indicator blinks.

Correcting common errors

1. The actual nature and cause of the error may be reported immediately through a message on your

   screen. If not, open WIDEsystem (double-left-click the scanner icon ⚙ on your system tray) and select the Status tab to view additional information about the error.
2. The information on your screen may include instructions and actions to remedy the error. Follow the instructions on your screen.
3. Look for a description of the error and remedy in this users guide's trouble shooting section. Follow the instructions provided.

Technical assistance

In some cases you may need technical assistance. You should contact your service provider if one or more of the following cases is true:
a. … the error cannot be remedied through the action suggested on your PC screen.
b. … the error and its remedy is not described in this users guide.
c. … the system fails to report the error on your screen.

Before calling technical assistance prepare the following:

1. Write down your scanner model name and serial number. The serial number is the 5 character string printed on a label on the back of the scanner.
2. Write down your Firmware version. See the section *How to identify the firmware version running in the scanner?*.
3. There are 4 diagnostic LEDs at the scanner back. Their current lighting status may tell the technician something about the error. Write down the lighting and color pattern of the diagnostic LEDs.

4 diagnostic LEDs at the scanner back

NOTE: Your manufacture's website contains service provider contact information.

Problems Related to Scanner Installation

Problem	Possible Causes and Remedies
"Unknown device is found" message.	- Your interface is not enabled on the PC or set up correctly. Go through the installation steps for your interface board and its driver and control that the Windows device manager lists the interface option. - WIDEsystem drivers were not installed before connecting the scanner. Shut down the scanner and PC, unplug power and USB connections and restart the installation from step 1 as described in the installation section of this guide. If you continued installation before installing WIDEsystem, see the troubleshooting instructions below. - Loose interface connection – on both ends, unplug and then firmly plug-in the interface cable. - System needs rebooting - shut down the scanner and PC, unplug power and USB connections. Then plug in the USB connections and turn on the PC. When Windows is loaded, plug in the scanner power and turn on the scanner main power switch.
No functional drivers found – yellow error icon on scanner in Device Manager I got the "Unknown device is found" message and continued installation of the scanner. Now the scanner appears as incorrectly installed on my system.	If you connected and tried to install the scanner before installing WIDEsystem, the "unknown device found message" will appear. If you ignored this and continued to step through the dialogs from there, the scanner will be entered on the system as a new device without functional drivers. If this is the case, the scanner will be displayed in the Windows Device Manager with a yellow error icon. The scanner entry must be removed from the Device manager before re-installing correctly. 1. In the Device Manager - remove the scanner entry. 2. Shut-down the PC, shut down and unplug the scanner, disconnect the scanner from the PC. 3. Perform the installation from step 1 as described in the installation section of this guide. Be sure to install WIDEsystem before connecting the scanner.
WIDEsystem does not detect the scanner.	- The WIDEsystem driver version installed on your PC is older than your scanner model. Install the WIDEsystem drivers from the WIDEsystem TOOLS CD-ROM that came with your scanner. If not available, download the newest version from your manufacturer's website or contact your dealer to obtain the right WIDEsystem version. - WIDEsystem drivers were not installed before connecting the scanner. Shut down the scanner and PC, unplug the connections and restart the installation from step 1 as described above. - Loose interface connection – on both end, unplug and then firmly plug-in the interface cable. - System needs rebooting - shut down the scanner and PC, unplug the connections. Then plug in the interface connections, turn on the PC and when Windows is loaded, turn on the scanner.

Trouble Shooting

Problems Related to Operation of the Scanner

Problem	Possible Causes and Remedies
Error Indicator LED blinking	An error was detected. The error may be reported immediately through a message on your screen. If not, open WIDEsystem (scanner icon on your system tray) and select the Status tab to view additional information about the error. Perform one of the following: • The information on your screen may include instructions and actions to remedy the error. Follow the instructions on your screen. • Look for a description of the error in this users guide. Follow the instructions provided. • In some cases you may need technical assistance. You should contact your service provider if one or more of the following cases is true: a. … the error cannot be remedied through the action suggested on your PC screen. b. … the error and its remedy is not described in this users guide. c. … the system fails to report the error on your screen.
Need to contact Technical assistance	In order to get the best and fastest solution to your problem, you should prepare as much information as possible before calling your service provider for technical assistance. Your manufacture's website contains service provider contact information. See instructions above.

Error message: Paper Jam

You know a Paper jam error has occurred when the scanner stops scanning and the Paper-Ready LED shuts OFF (from blinking) while the document is still engaged in the drive system. Your software will report the *Paper Jam error*. To remedy:

1. Eject the document from the scanner. Press and hold down the Paper-Backwards or the Paper-Forward key.
2. If the document does not eject/respond to pressing the keys, you will need to open the scanner lid to remove it.
3. Simultaneously press the lid release buttons towards the scanner's center with your fingers until you feel them unlock. Use your other fingers to grip the edge of the lid.

Open the lid – Press the lid release buttons.

4. With one hand, pull the lid backwards to open and use the other hand to pull out the document so it comes completely free of the scanning area.
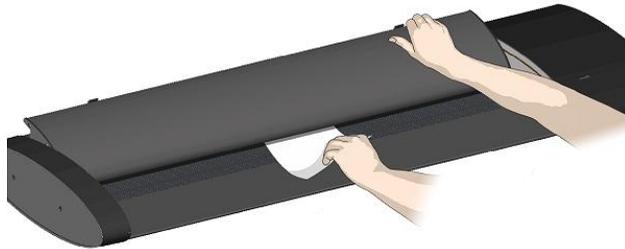
Hold the lid open and remove the document.

5. Close the lid.
6. When the scanner is ready again, reload the document again to scan.
7. If you still get a paper jam error, repeat the steps above but select the *Soft-handling* option in your software before reloading.

Scanner Maintenance error message: *Stitching …. failed*	This message may appear when running the *Scanner Maintenance* program. 1. The most common cause is a dirty or smudged glass plate. Clean the scanning area, reboot the scanner and then complete the calibration steps as described in the section <u>*Maintenance* in this guide</u>. 2. If the problem persists after cleaning the scanning area - The problem could be caused by a loose object in the optical path. Remove any torn pieces of paper or other loose objects from the scanning area. Even the smallest loose objects will disturb the scanner's adjustment function. 3. Summon your technical service provider if the problem persists.
Application control keys (one touch) do not work	1. Check the One Touch setup entries in WIDEsystem. Click on the scanner icon to open WIDEsystem and select the One Touch tab. View WIDEsystem Help for instructions. 2. Check that the applications defined in the WIDEsystem One Touch setup entries are installed on your PC 3. Make sure that the applications defined in the WIDEsystem One Touch setup entries are actually designed to work with (compatible with) your scanner's application control keys. See the application's documentation or contact the application software dealer.
Can't operate or contact scanner after Firmware upgrade failure.	A power failure could interrupt an ongoing firmware upgrade process. The scanner will not run correctly after an interrupted firmware update process. Only part of the intended firmware may be loaded, rendering the scanner inaccessible. You need reboot the scanner to *Safe Mode* to reapply the firmware. Restart the scanner. If the scanner detects corrupted firmware, it will start up in *Safe Mode*. Confirm *Safe Mode*: Open WIDEsystem – Right-double-click the WIDEsystem scanner icon on your system tray. The *"Scanner:"* field should show "Scanner is in Safe Mode". Follow the steps for firmware installation. **NOTE**: *Safe Mode* is only for repairing a corrupted or interrupted firmware installation. Do not attempt to use the scanner when it is in *Safe Mode*.

Problems Related to the Scanning Results

Problem	Possible Causes and Remedies
Entire image is not scanned	1. Check in your scanning application that your size settings are either for Auto detection or correspond to the size of the whole original. 2. Check in your scanning application that you are loading the original correctly. Be sure to align the center of the original with the scanner's center arrow marking.
Stitching problems – Image sections misaligned (at points between the sensors -overlapping pixels)	1. Remove the original from the scanner and calibrate the scanner with the Scanner Maintenance program. Calibration includes correction of stitching errors. 2. If the problem persists after calibration – Your sensors may need readjusting. Summon your technical service provider.
One or more thin vertical lines (in the direction of paper feeding) show up in the scanned image, but not in the original drawing.	This is often caused by an unclean glass plate. Even a single spec of dirt in the wrong spot on the glass plate can apply a streak along your entire scan. To remedy: 1. Clean your glass plate and rollers as described in this users' guide. 2. Most dirt on the glass plate is introduced by the documents that are passed against it. Wipe clean the document with a dry lint-free cloth before feeding the document into the scanner. 3. If the problem persists after cleaning, calibrate the scanner with the scanner maintenance program. The scanner may have memorized dirt specs and you need to recalibrate after dirt-removal. 4. If the problem persists after cleaning and calibration –Check the glass plate for scratches. A damaged glass plate should be replaced. Obtain a new glass plate from your service provider. Follow the steps in the user's guide to replace the glass plate with a new one.

Appendixes

Important safety instructions

⚠️ Read all of these instructions and save them for later use. Follow all warnings and instructions marked on the scanner.

A. Do not place the scanner on an unstable surface, stand, cart or table. Serious damage can be caused if the unit falls.

B. When cleaning, do not spray/apply liquid cleaners directly onto the scanner parts. Apply liquids to your cloth and then use the dampened cloth to clean.

C. Before **cleaning** or replacing any **user-replaceable parts**, be sure to turn the scanner power off and disconnect the power plug.

D. The scanner should be operated from the power source type indicated on the marking label. If you are unsure of the type of power available, consult your dealer or local power company.

E. The scanner is intended for use on IT, TT and TN power distribution systems, and is equipped with a three-wire grounding type plug. This plug will fit only into a grounding-type power outlet. This is a safety feature which relies on building installation. If you are unable to insert the plug into the outlet contact your electrician to replace your obsolete outlet. Do not defeat or ignore the purpose of the grounding-type plug.

F. Do not allow anything to rest on the power cord. Do not locate the scanner where persons will walk on the cord.

G. If an extension cord is used with the scanner, make sure that the total ampere ratings of the products plugged into the extension cord does not exceed the extension card ampere rating. Make sure that the total rating of *+all products plugged into the wall outlet does not exceed 15 amperes.

H. Slots or openings in the cabinet at the back or bottom are provided for ventilation. This ensures reliable operation of the product and protects it from overheating. These openings must never be blocked or covered. The openings should never be blocked by placing the unit on a bed, sofa, rug, or other similar soft surface. This product should never be placed near or over a radiator or heat register. This product should not be placed in a built-in installation unless proper ventilation is provided.

I. Never push objects of any kind into the scanner through cabinet slots since they may touch dangerous voltage points or short out parts that could result in a risk of fire or electrical shock. Avoid any possibility of spilling liquid of any kind on the scanner.

J. Do not attempt to service the scanner yourself. Opening or removing those covers requiring tools may expose you to dangerous voltage points or other risks. Refer all servicing in those compartments to authorized service personnel.

K. Unplug the scanner from the wall outlet and refer servicing to authorized service personnel under the following conditions:

- When the power cord or plug is damaged or frayed.
- If liquid has been spilled into the scanner.
- If the scanner has been exposed to rain or water.
- If the scanner does not operate normally when operating instructions are followed then adjust only those controls covered by the instructions in this manual. Improper adjustment of controls other than those mentioned in this manual may result in permanent damage and will at best require extensive work by a qualified technician to restore this product to its normal operation.
- If the scanner has been dropped or the cabinet has been damaged.
- If the scanner exhibits a distinct change in performance, indicating a need for service.

Regulations

FCC Regulations

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

- 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.

CE Regulations

EU
This equipment has been tested and found to comply with the limits for a Class B product according to EN55022.

VCCI Regulations

Japan
This equipment has been tested and found to comply with the limits for a Class B product according to Agreement of VCCI:2008 (CISPR 22).

Toxic or Hazardous Substances or Elements
有毒有害物质或元素名称及含量

Part Name 部件名称	Toxic or hazardous Substances and Elements 有毒有害物质或元素					
	Lead (Pb) 铅	Mercury (Hg) 汞	Cadmium (Cd) 镉	Hexavalent Chromium (Cr (VI)) 六价铬	Polybrominated biphenyls (PBB) 多溴联苯	Polybrominated diphenyl ethers (PBDE) 多溴二苯醚
Scanner 荧光灯管	O	O	O	O	O	O

O: Indicates that this toxic or hazardous substance contained in all of the homogeneous materials for this part is below the limit requirement in SJ/T11363-2006.

表示该有毒有害物质在该部件所有均质材料中的含量均在SJ/T11363-2006标准规定的限量要求以下。

X: Indicates that this toxic or hazardous substance contained in at least one of the homogeneous materials used for this part is above the limit requirement in SJ/T11363-2006.

表示该有毒有害物质至少在该部件的某一均质材料中的含量超出 SJ/T11363-2006标准规定的限量要求。

(Enterprises may further provide in this box technical explanation for marking "X" based on their actual conditions.

企业可在此处根据实际情况对上表中打" X"的技术原因进行进一步说明。)