WideTEK 25

Setup and Assembly Manual

This device is ENERGY STAR compliant.

Introduction

Dear Customer,

We congratulate you on the acquisition of this innovative product from Image Access.

We at Image Access are proud of the work we do; it is the result of our extremely high standards of production and stringent quality control.

With this scanner, Image Access offers an efficient scanner which covers a wide scope of applications due to its versatility. Its integrated web based user interface makes all functions available in structured menus.

This manual is designed to lead the user through all necessary assembly and setup steps after the WideTEK 25 has been delivered.

For this reason, we ask you to read the this manual attentively before starting to work with the scanner. By doing so, you will avoid errors from the beginning and you will be able to control all functions from easily.

Please also consider the following points:

- Damages to your unit may have occurred during shipping. Please check for damages immediately after delivery of the unit. Inform your supplier if damage has occurred.
- Read and ensure that you understand the safety notes. They were developed for your protection and safety as well as to protect the unit.
- Regular maintenance conserves the high quality and safety of your WideTEK 25 scanner during the entire service life.

If you have any further questions, please feel free to contact your local dealer or Image Access directly. Our staff will be happy to help you.

For your daily work with your new scanner, we wish you success and complete satisfaction.

Regards

Your Image Access Team

About this Manual

Setup and Assembly Manual

The **Setup and Assembly Manual** is written for technical staff with some basic mechanical as well as software skills. Many resellers will offer on-site installation; therefore, large parts or all of the setup and assembly manual might not be of interest to the reader. The access level at which the setup and adjustment processes are performed is called “Power user”. This “Power user” level is password protected from access by the normal operator.

All information about the normal operation and behavior of this device is found in the **Operation Manual**.

All available manuals for this device can be downloaded from our customer service portal at http://service.imageaccess.de. Be sure to always check for the latest versions of these manuals.

This manual is divided into four sections, A to D.

Section A describes the hardware of the device. It includes unpacking and mechanical installation. These instructions must be followed carefully to ensure proper functionality, best possible quality and performance of the device. This device is a precise optical instrument and should be handled accordingly.

Section B describes the software setup. It includes the optical adjustments necessary after the setup. The section also describes the installation procedure for software options.

Section C describes troubleshooting procedures and test scan generation.

Section D shows all technical data and declarations.

Version History

Version	Published in	Content/Changes/Supplements
A	June 2008	**First release**.
B	July 2008	New order in chapter C. Additional information concerning removing/assembling the device cover.
C	December 2008	Additional transportation lock at the back. New order in chapter A.
D	February 2009	New: Chapter C.2.1. Description of the assembling of the new hinges.
D3	October 2009	Error codes table reworked, table of warnings and information additionally inserted.
D5	February 2010	Chapters renumbered. Chapter D.3 Electr. Spec. New value for stand-by consumption, another power supply is used.

As an ENERGY STAR® Partner, Image Access has determined that this product meets the ENERGY STAR® guidelines for energy efficiency.

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A Hardware Setup

A.1 Safety Notes

Read and ensure that you understand the safety notes.

They are designed for your protection and for your safety.

Follow all safety notes to avoid damage to the device.

A.1.1 Marking of Safety Notes

All safety notes are marked with a yellow triangle warning sign.

Next to the warning sign, you'll find a description of the danger.

Safety Note!

A.2 Certification

The WideTEK 25 scanner fulfills all requirements of the following standards:

IEC 60950, International Safety Standard for Information Technology Equipment

and

UL 60950, Safety of Information Technology Equipment (US and Canadian standard).

A.3 General Notice

This manual describes the functions of a complete equipped WideTEK 25 scanner. If your device is not equipped with all features, deviations are possible.

A.4 Safety Precautions

Warning: Please read all the safety precautions before you operate the scanner. Serious injury can occur to you or to others if you do not know how to use it safely. Please follow the safety precautions in this manual exactly.

To prevent fire or shock hazard, **do not expose** this device to rain or any type of moisture.

Follow all safety precautions to avoid personal injury or damage to the device.

1. Place the scanner in a clean, well-ventilated room. Do not operate the scanner in an area with poor ventilation.
2. Openings in the scanner's housing in the front or at the back are provided for air circulation. Do not cover or block the openings.
3. Do not place the scanner near a heat or cold emitting source such as a space heater, furnace, or air conditioning unit.
4. Do not place the scanner near any devices or electrical boxes emitting high voltage.
5. Always place the scanner on a stable surface.
6. Do not lean on the scanner.
7. Do not place cups containing liquids or other such objects on top of the scanner or on the scanner table. If liquid spills into the scanner it can cause damage. If this occurs, turn the scanner off, unplug the power cord from the wall receptacle and contact the Image Access Technical Support.
8. Do not put any objects into any scanner housing openings unless specifically instructed to do so by Image Access Technical Support.
9. Do not disassemble the scanner. If there is a need to disassemble the scanner, please contact the Image Access Technical Support.
10. Do not use the scanner if it has been physically damaged. If this occurs, turn the scanner off, unplug the power cord from the wall receptacle and contact the Image Access Technical Support.
11. The scanner should be used only with the power cord that is supplied with the scanner. If you are unsure, please contact the Image Access Technical Support.
12. Image Access recommends plugging the scanner into an appropriately-rated power conditioner.
13. Always turn the power off and unplug the power cord from the wall receptacle before cleaning the scanner.
14. When cleaning, only use Image Access approved cleaners. Do not use any type of solutions, abrasives, or acids such as acetone, benzene, kerosene, mineral spirits, ammonia, or nitric acid. Do not use any cleaners that contain these chemicals.
15. Use a dry or damp lint free cloth for cleaning the scanner.
16. Do not spray any liquids directly onto the scanner. Spray cleaning fluids directly onto the cleaning cloth and use the cloth to clean the scanner.

A.5 Content on Delivery

The scanner is delivered in a wooden transport box. The transport box also contains two plastic bags, a folder with reference targets, and the manuals.

Picture 1 shows the transport box including all material which comes with the scanner.

Picture 1: Scanner WideTEK 25 in transport box

1: Scanner WideTEK 25.

2: Plastic bag with “Recovery Key” and cable set. The cable set consist of:

Network cable. Connects the scanner to the network. All network parameters such as IP address, subnet mask and gateway must be set via the touchscreen prior to the first use.

Crossover cable. Connects the scanner directly to a computer via the network card.

Power cable. Connects the scanner to the wall outlet

3: Reference folder. It contains:

4x Color Scanner Test Target CSTT-1

4x Line Reference Sheet LRS-200

4: Plastic bag with 3x White Reference Targets WT36-Z-02-A.

Please note: Keep the wooden transport box for future use! In case of guarantee the scanner must be sent back in the original transport box to avoid transport damages.

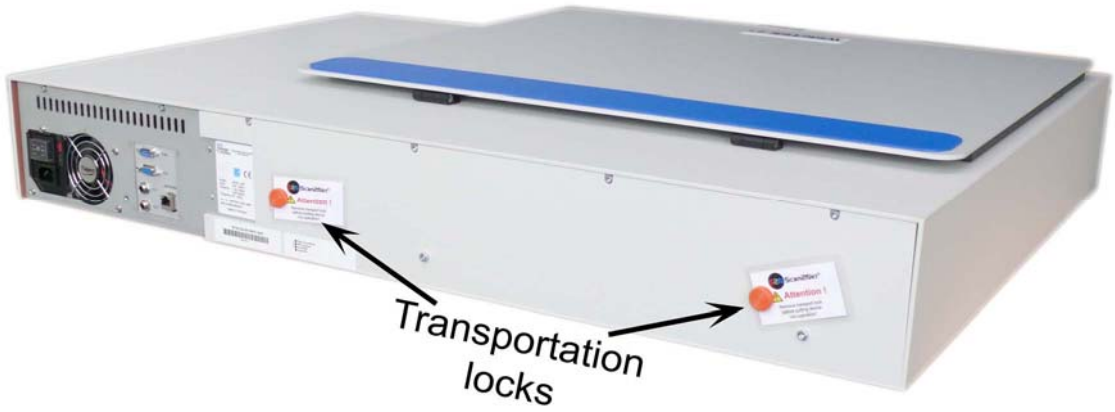
A.6 The Transportation Locks

A.6.1 Removing the Transportation Locks

Attention

The transportation locks have to be removed **before initial start-up** of the device!

The transportation locks are located at the back of the scanner. A label marks each transportation lock.



Picture 2: Position of transportation locks

Turn the transportation locks counterclockwise to remove them.

Picture 3: Removing the transportation lock

Important: Keep the transportation locks for future use!

The transportation locks must be inserted **before** every transport. This will prevent the sensitive components inside the camera box unit against damages.

A.6.2 Inserting the Transportation Locks

Attention

Before transporting insert the transportation locks to prevent the camera box unit against damages!

Before inserting the transportation locks the camera box unit must be moved into transport position.

The transport position of the camera box unit is at the back side of the scanner – seen from the operator's position.

When the power down sequence ends normally, the camera box unit moves to its transport position. If the camera box unit is in any other position after switching off, restart the device as described in chapter A.11.1.

Afterwards turn it off as described in chapter A.11.2. The power down sequence moves the camera box unit to the transport position, finalizes all internal processes in the scanner and switches the device to stand-by mode.

Switch off the WideTEK 25 at the main power switch (see Picture 7).

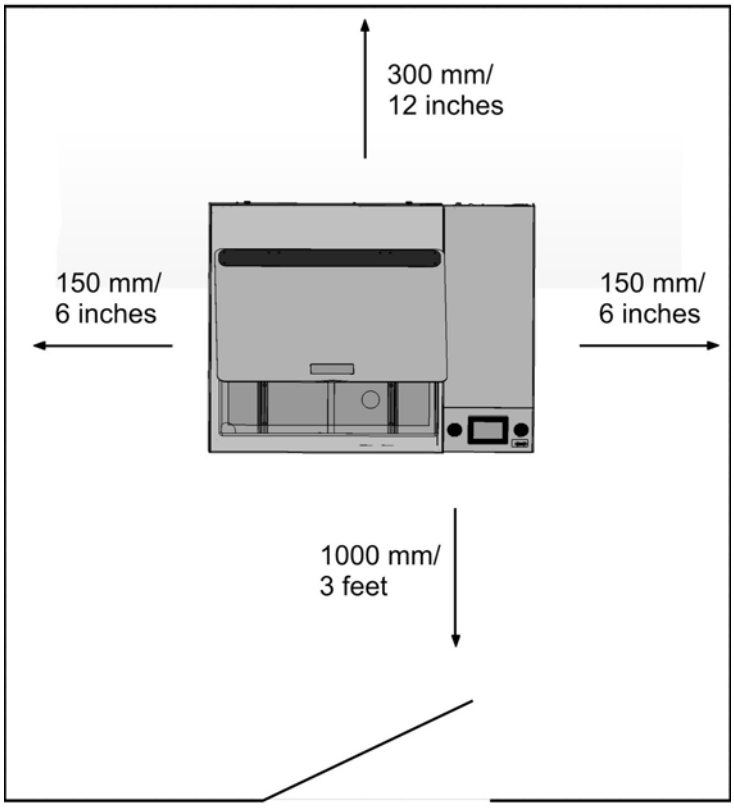
Picture 4: Inserting the transportation lock

Insert carefully the transportation locks which come with the scanner.

Hand-tighten by turning it clockwise. Using more force could result in damage of the camera box unit.

A.7 Device Location

Please allow a minimum of 150 mm (6 inches) from any side walls and 300 mm (12 inches) from a back wall. Leave one meter (3 feet) minimum distance from any door or entrance way. Use the illustration below as a guide.



Picture 5: Minimum distances

Do not operate the scanner in an area that has poor air circulation and/or that is non-ventilated.

Place the WideTEK 25 on a flat and solid base. The load bearing capacity of the base must correspond to the device weight.

Placing the WideTEK 25 on the optional floor stand is recommended for the best ergonomic position while using the scanner.

Choose a location that complies with the limits of temperature and humidity. Refer to the technical specification.

Note: Before using the WideTEK 25 scanner in the new environment allow at least one hour for temperature adaptation.

Temperature adaptation means:
A fast change from cold to warm environmental conditions can build up condensation inside the housing. This will result in unfavorable scanned images and could cause permanent damages to the unit.

A.8 Maintenance

Important: While cleaning the scanner, ensure that no liquids will penetrate into the device housing.

A.8.1 Touchscreen

The touchscreen can be cleaned with a dry micro fiber cloth. Before cleaning the touchscreen the WideTEK 25 must be switched off (see chapter A.11.2) and the main power switch (see Picture 7, item 1) must be set to position **0**.

A.8.2 Surfaces

Use a soft, dampened cloth to clean the housing of the scanner. Recommended is a micro fiber cloth.

A.8.3 Glass plate

Important: **Do not use** any cleanser with solvents to clean the glass plate!

The glass plate of the WideTEK 25 has a special non-reflective surface coating.

Clean the glass plate with an appropriate glass cleaner and use a soft cloth. Recommended is a micro fiber cloth.

After cleaning dry the glass plate with a soft cloth.

A.9 Repair

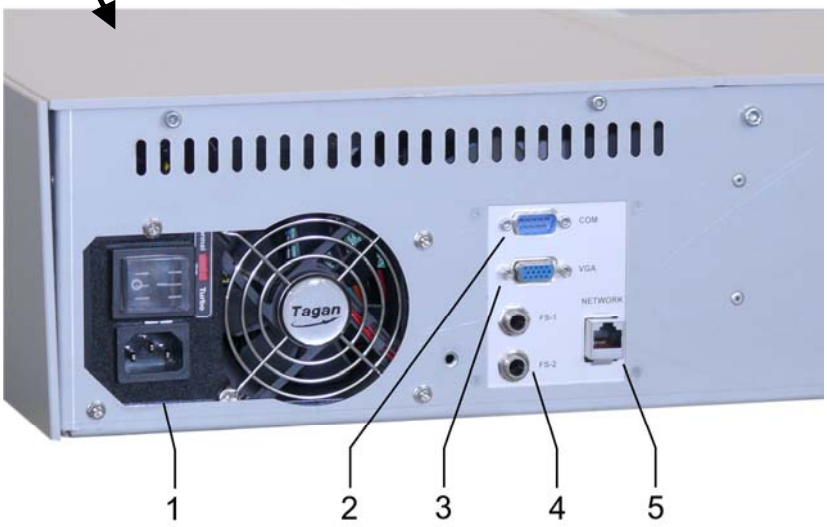
Note: There are not any parts of the WideTEK 25 scanner which can be repaired by the user.

All repairs should be done only by a trained technician.

A.10 Connectors on the Back

All connectors are positioned at the right side of the back of the housing, seen from the operator's view (i.e. from the front of the scanner).

Picture 6: Back of WideTEK 25



Picture 7: Connectors on the WideTEK 25

1. Power connector and main power switch
2. Serial connector
3. VGA connector
4. Two foot pedal connectors
5. Network cable connector

A.10.1 Connecting to the Network

Insert the network cable (delivered with the scanner) into the network cable connector (Picture 7, #5). Connect the other side of the cable to a plug-in of an existing network.

Alternatively the scanner can be connected directly to a computer with network card by using the crossover cable. In this case ensure that the network addresses used by the computer and the scanner allow direct connection.

A.10.2 Connecting to the Power Source

Before connecting the scanner to the electrical outlet check the following items:

Ensure the electrical outlet is in perfect condition and that it is properly grounded.

Ensure that the electrical outlet is equipped with a fuse with the proper capacity.

The electrical outlet must be near this device and must be easily accessible.

Inspect the power cable and ensure that it is undamaged.

Use only the power cable delivered with the scanner.

Turn the device off before plugging or unplugging any cable.

A.10.3 Powering up the WideTEK 25

The main power switch is found above the power connector. Picture 7 shows the position of the power connector and main power switch.

Connect the power cable with the electrical outlet and switch the main power switch to position **I**. When the main power switch is in position **I**, the scanner is in stand-by mode.

NOTE: While using the WideTEK 25 in work conditions, it should **only be switched on and off by the touch panel**!

A.11 WideTEK 25 Touch Panel

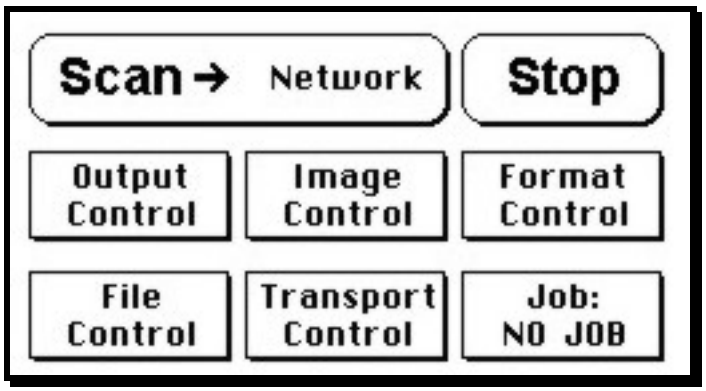
The WideTEK 25 parameters can be set and modified with the integrated touch panel. It shows an easy-to-use menu and helps the user to control all scanner parameters with the touch of a finger.

When the WideTEK 25 is powered up using the main power switch, the touch panel is illuminated in a dimmed mode and shows the stand-by screen. The stand-by screen shows the Image Access logo and the blinking message **Touch screen to power up**.

A.11.1 Starting the WideTEK 25 from Stand-By Mode

When the WideTEK 25 is in stand-by mode, it can be started by tapping the touch panel on any arbitrary position. The touch panel lights up and a rotating hourglass indicates that the start sequence is running.

When the start-up sequence is finished, the touch panel shows the start menu screen.



Picture 8: Start menu screen

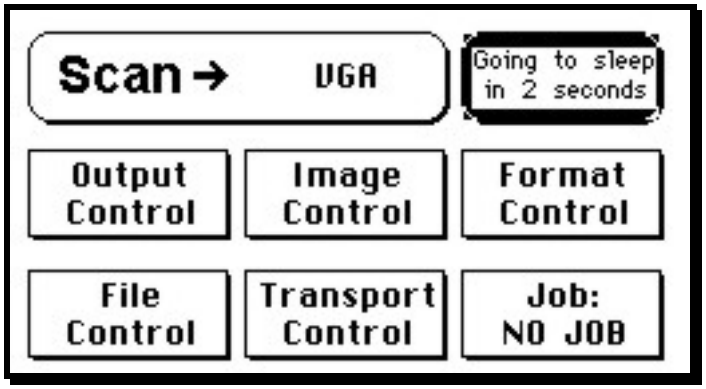
A.11.2 Turning-off the WideTEK 25 by the Touch Panel

NOTE: **Always** turn off the WideTEK 25 scanner with the **Stop** button on the touch panel!

The main power switch should only be used **before** the scanner is disconnected from the electrical outlet.

To turn off the WideTEK 25, press and hold the **Stop** button on the touch panel.

While the **Stop** button is held, a counter in the button shows the remaining time until the WideTEK 25 is powered down.



Picture 9: Touch panel while shut down in progress

At the end of the power down sequence, the display will be dimmed.

A.12 Network IP Address

Controlling the WideTEK 25 scanner is based on the Scan2Net technology.

That means, access to the scanner and to the integrated Scan2Net interface will occur by using a network connection. Every browser software can be used to work with the scanner.

The default network IP address of the scanner is **192.168.1.50**

This IP address is also valid after using the function “Reset to Factory Defaults”.

To adapt the scanner to an existing network, the IP address and other network parameters can be modified by using the touch panel as well as the Scan2Net interface.

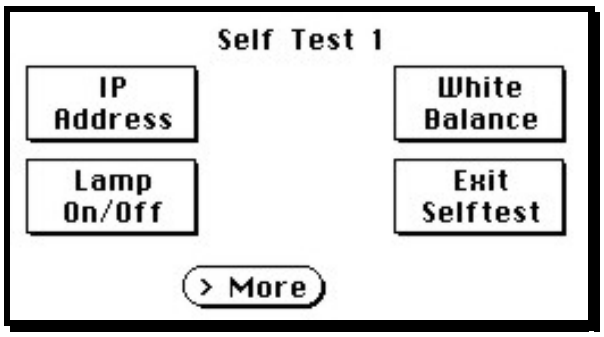
The following chapter will describe how the IP address can be modified with the touch panel. Another chapter, following later, will describe how to modify the IP address by using the Scan2Net interface.

A.12.1 Adapting the IP address with the Touch Panel

When the WideTEK 25 is in stand-by mode, it can be started by tapping the touch panel on any arbitrary position. The touch panel lights up and a rotating hourglass indicates that the start sequence is running.

While the start sequence is running, tap on the touch panel at least **three times successively**.

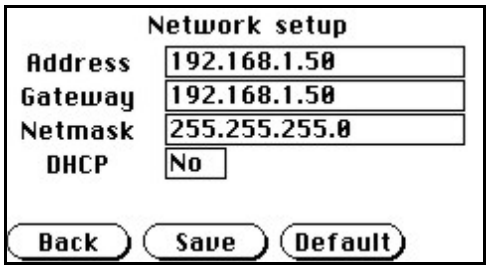
At the end of the start sequence the touch panel shows the menu **Self Test 1**.



Picture 10: Menu Self Test 1

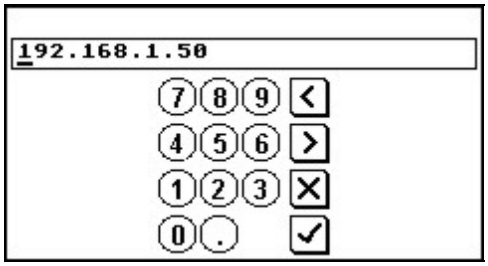
By tapping the fields you can change to the submenus.

Tap on the field **IP Address**. The menu in the touch panel changes and shows the **Network setup** mask.



Picture 11: Network parameters

Tap on the line to be changed, e.g. the **Address** line. The touch panel will show the following:



Picture 12: Numerical keyboard

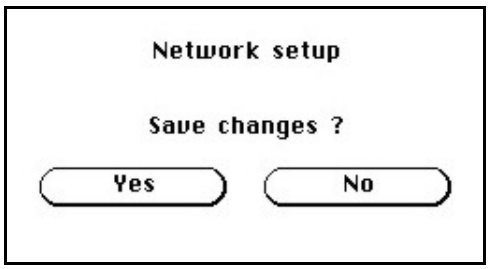
Enter the values with the displayed numerical key board. The keys **<** and **>** will move the cursor, the key **X** deletes the character at the current cursor position.

After entering the IP address, tap on the checkmark symbol finally.

The touch panel display then will change and shows the network parameters.

To save the modified values tap on the field **Save**.

The display changes again. Tap on **Yes** to confirm saving of the new values.



Picture 13: Confirm changes

After saving the changes the display returns to the **Self Test 1** menu (Picture 10).

A.13 Optical Adjustment

Whenever the device is setup for the first time, moved to a different location, cleaned or serviced and/or after a software update; some adjustments have to be performed to guarantee maximum quality and accuracy.

A.13.1 White Balance

The white balance function is the most important function for consistent image quality.

To ensure optimal performance, the WideTEK 25 should be calibrated in regular intervals to compensate for light degradation, variations in the paper quality of the documents to be scanned, and other long term effects;

A.13.1.1 Helpful information about the white balance adjustment

The scanner has built-in light sources of known and stable quality consisting of state-of-the-art white LEDs.

In the first step, the overall sensitivity of the scanner is adjusted in such a way that the brightest area results in an almost saturated output signal. This assures that the largest density range possible is used. After this adjustment is done, the uneven light distribution on the CCD caused by the imbalance of the lamps, the ambient light introduced, the imperfections of the lens and other factors has to be compensated for.

This measurement results in a correction function which levels the brightness over the complete scan width.

The quality of the test target is of utmost importance to the result of the white balance. The test target is on reflective paper which diffuses the light. If the test target has dirt, wrinkles or anything visible to the human eye on it, the CCD will also see this and will overcompensate in these areas. Although the internal software has been programmed to eliminate these imperfections to a certain degree, it still leads to unreliable results if the target is not of the defined quality.

If the target is of defined quality, the scanner will calibrate successfully. Calibration means that the “white” of the test target in the given illumination situation produces a “white” output in the digital domain. Consequently, all scans of white paper having different properties than the test target results in brightness and possibly color shifts.

Periodically performing the white balance adjustment is recommended to ensure consistent best scan results.

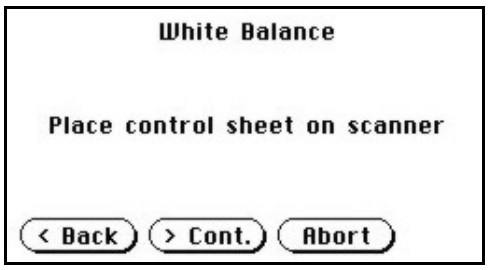
A.13.1.2 Performing the White Balance Adjustment

Start the scanner as described in chapter A.11.1.

While the start sequence is running, tap on the touch panel at least **three times successively**.

At the end of the start sequence the touch panel shows the menu **Self Test 1** (Picture 10).

Tap on the field **White Balance** to activate the adjustment process.



Picture 14: White Balance screen

< Back Returns to the former screen.

> Cont. Starts the measurement.

Abort Stops the measurement and the display returns to the former screen.

Picture 15: Test target placed on scanner

Place the white balance test target WT36-Z-02-A on the upper margin of the glass plate.

The test target must cover the complete width of the glass plate.

Now tap on **> Cont.**

While the white balance adjustment is running, the touch panel shows a progress indicator.

Picture 16: Progress indicator

At the end of the measurement the result will be displayed in the touch panel.

Tap on the field **Finish** to return to the menu **Self Test 1**.

Picture 17: White balance result

B Software Setup

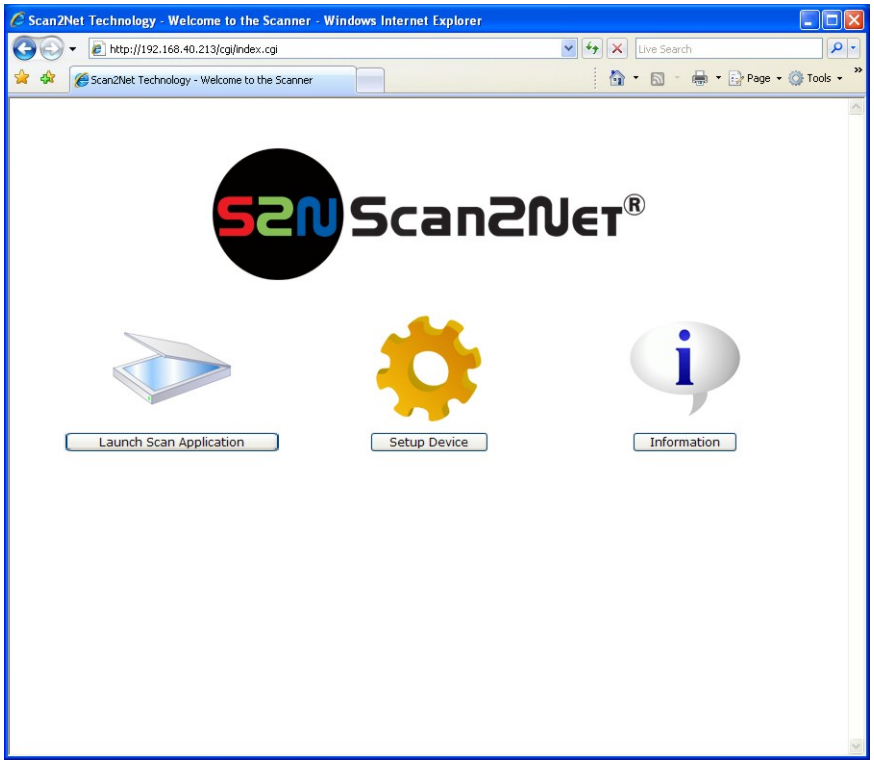
Essentially, the scanner is a web server and comes with its own HTML-based user interface. To access a Scan2Net scanner, any standard web browser can be utilized.

B.1 Start Screen of the Scan2Net User Interface

Start your browser.

Enter the IP address of the scanner. The default IP address of the scanner: **192.168.1.50**

The start screen of the integrated user interface will be displayed.



Picture 18: Start screen

The start screen shows three symbols, which lead to the main categories of the Scan2Net user interface.

Launch Scan Application changes to the main screen of the scanner interface.

Setup Device changes to the setup menu. Starting with the following chapter, the basics of the scanner configuration will be described.

Information shows a list of basic information about the scanner, e.g. serial number, the firmware version, the IP address and many more.

B.2 Setup Menu

Click in the start screen on the button Setup Device .

The next screen shows three buttons to select the login level. The access to the levels **Poweruser** and **Admin** are password protected.

Picture 19: Login level screen

B.2.1 Selecting the Login Level

User This level allows the user to get some status information of the WideTEK 25 scanner. This are e.g. the firmware version, the remaining lamp operating time, system information, and many more. Furthermore it allows to set a few basic parameters.

Poweruser Password protected level. Allows to set an extended range of system parameters and to execute some adjustments.

Admin Password protected. Allows to set a wide range of system parameters and to configure the scanner in detail.

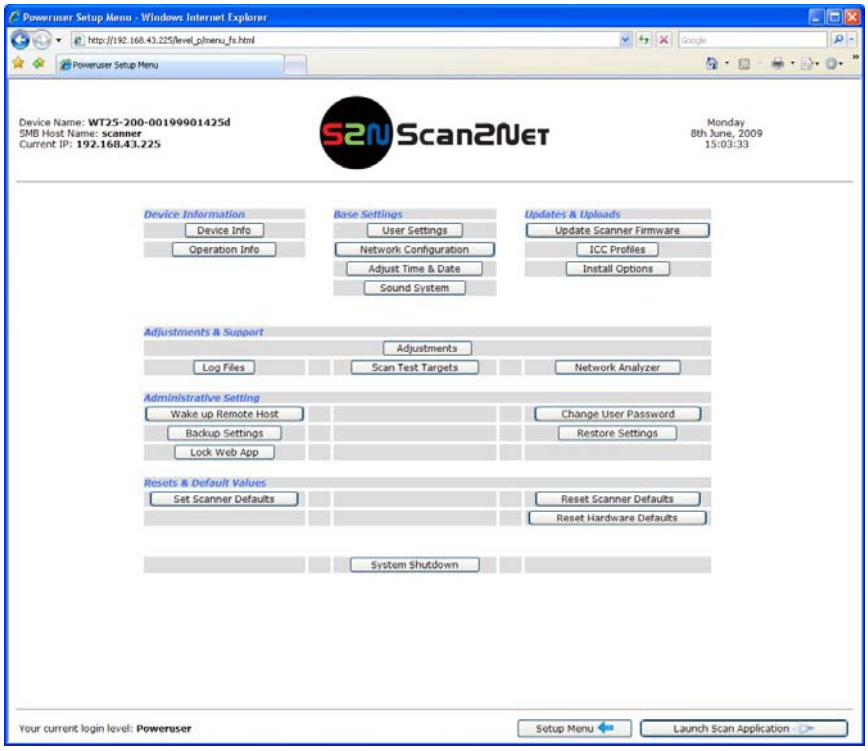
Access to the **Admin** level is limited for trained technicians.

B.3 Poweruser Login Level

For the following setup steps choose the login level Poweruser.

Default user name and default password for this login level are "Poweruser".

Note: Please consider that both the user name and the password are case-sensitive and that the first letter of both the user name and password are upper case.



Picture 20: Poweruser main menu

The person having access to this level can change the password and thereby limit access to normal operators.

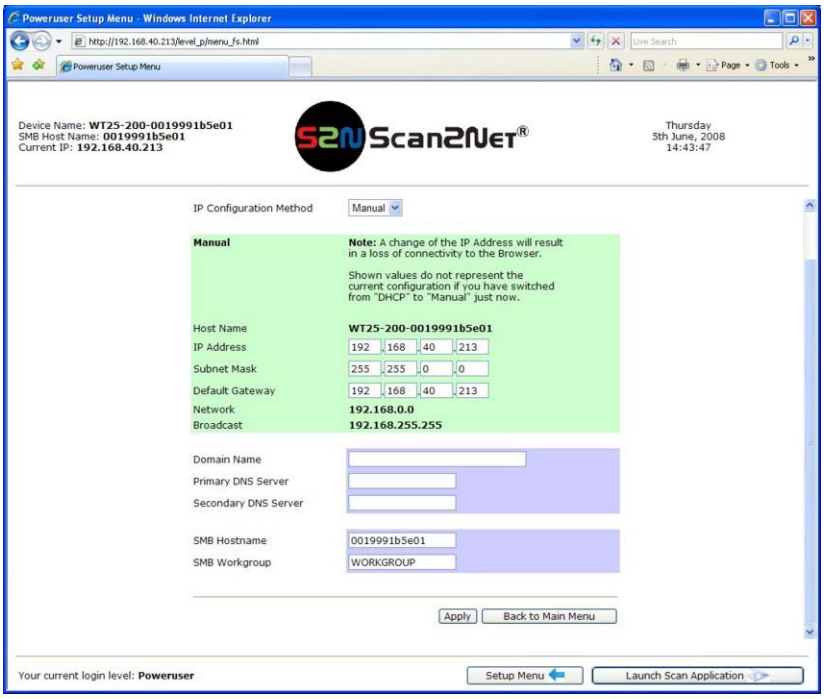
The main menu screen for the **Poweruser** level opens. The main menu is separated in several sections.

The subsequently described settings broaden the functionality of the scanner or activate additional functions.

Please notice: The description of the User Settings can be found in the operation manual, chapter **The SetupScreen**.

B.3.1 Setting the Network Parameters

Find the section **Base Settings** and click on the Network Configuration button.



Picture 21: Network parameters of the scanner

Now change the IP address, subnet mask and gateway to a valid address in your network or select DHCP to obtain an IP address automatically.

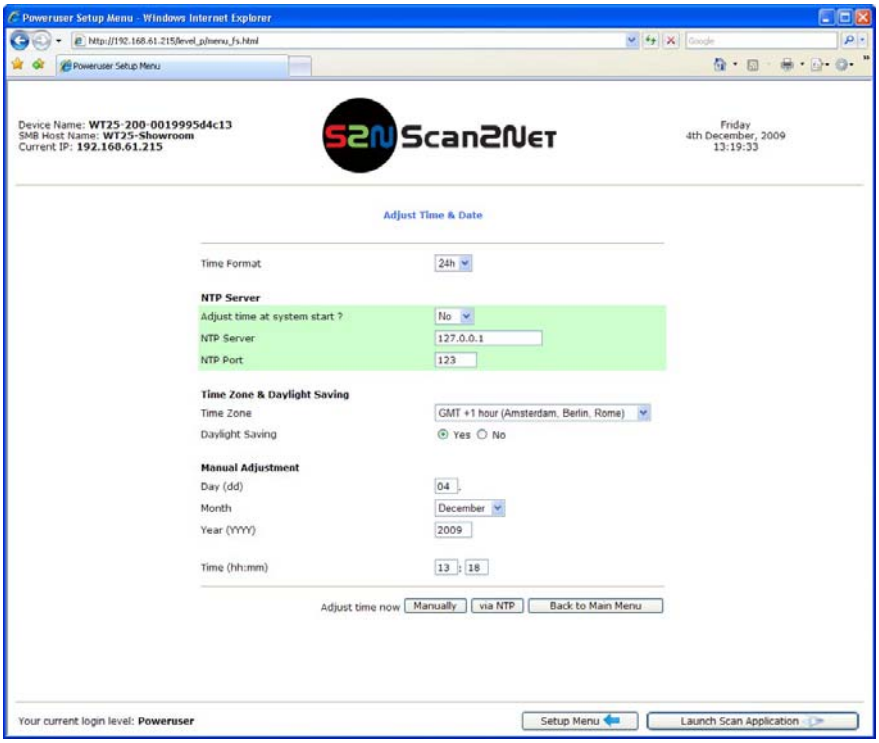
After modifying the network parameters click on the Apply button to transfer the new settings to the scanner. The scanner is now accessible with its new IP address.

Note: Depending on the used browser, it is necessary to delete the cache of the browser before the scanner is accessible.

Enter the new IP address of the scanner and again open the **Poweruser** main menu as previously described.

B.3.2 Adjust Time & Date

In the **Poweruser** main menu screen (Picture 20) locate the section **Base Settings**. Click on the button Adjust Time & Date.



Picture 22: Adjust Time and Date Screen

Select the time format.

Enter in section **NTP Server** all parameters for the communication with a NTP server.

Select the time zone and the daylight saving function.

Manually set the time and the date.

Click the button Manually to refresh all above modified data.

Click the button via NTP to connect to the above defined NTP server.

Note: By default, the name of a scanned image contains the scan time and date, therefore synchronizing the internal clock can be of some value.

B.3.3 Sound Control

Locate the section **Base Settings** in the **Poweruser** main menu screen and click the Sound System button.

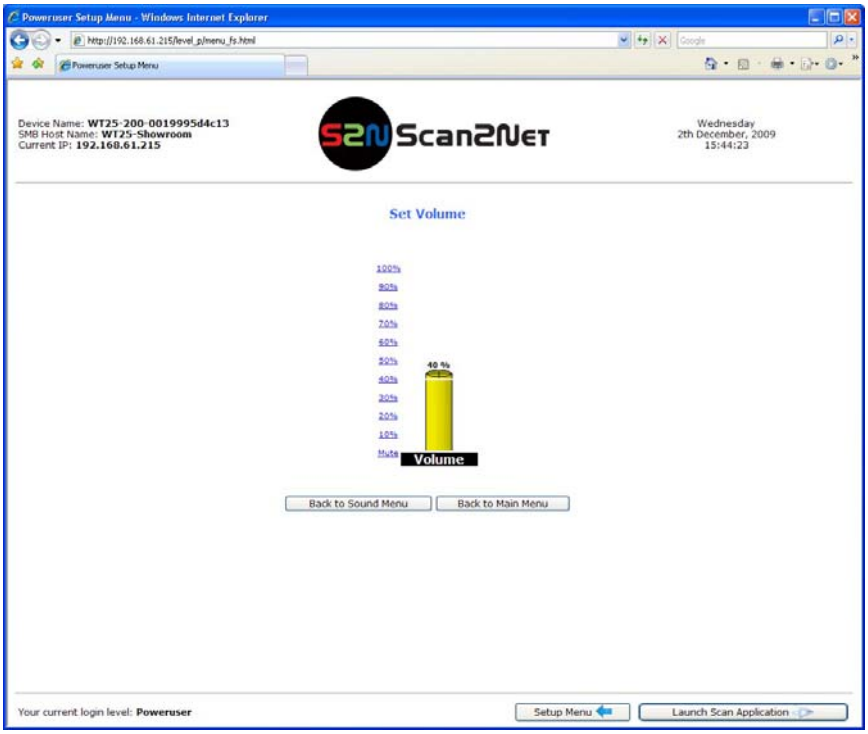
Picture 23: Sound System screen

This menu allows to

- set the volume,
- upload additional sound files to the scanner,
- link events to sound files.

B.3.3.1 Set Volume

Click on the button Set Volume .

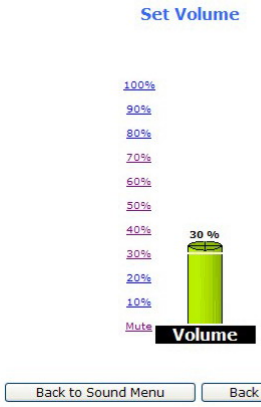


Picture 24: Volume level displayed

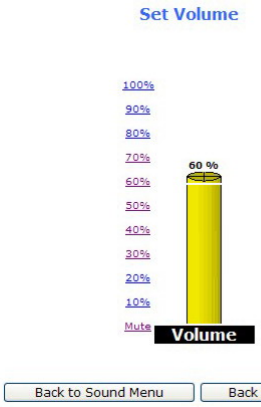
To set the volume level, click on the desired percentage value in the list left beside the graphic symbol.

The symbol color changes depending on the selected value.

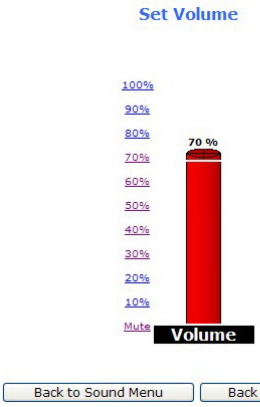
Up to 30%



Up to 60%



70% or higher



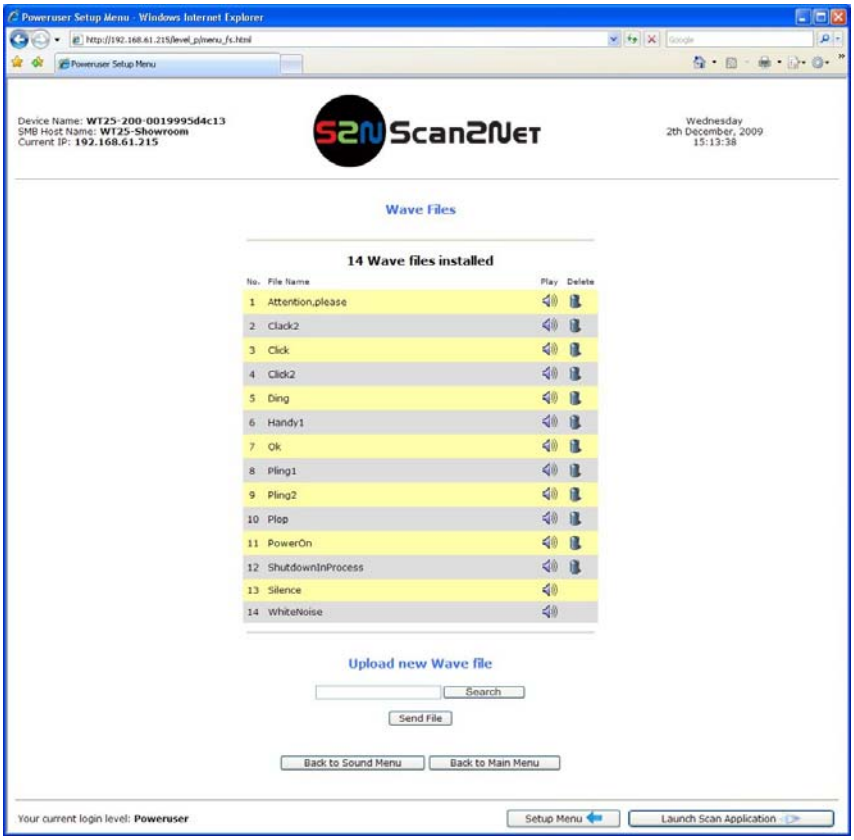
Back to Sound Menu returns to the former menu.

Back to Main Menu returns to **Poweruser** main menu (Picture 20).

B.3.3.2 Wave Files

Additionally sound files can be uploaded to the already installed sound files. The data format of the sound files is WAV.

Click on the button Wave Files.



Picture 25: List of sound files

The list of the installed sound files will be displayed.

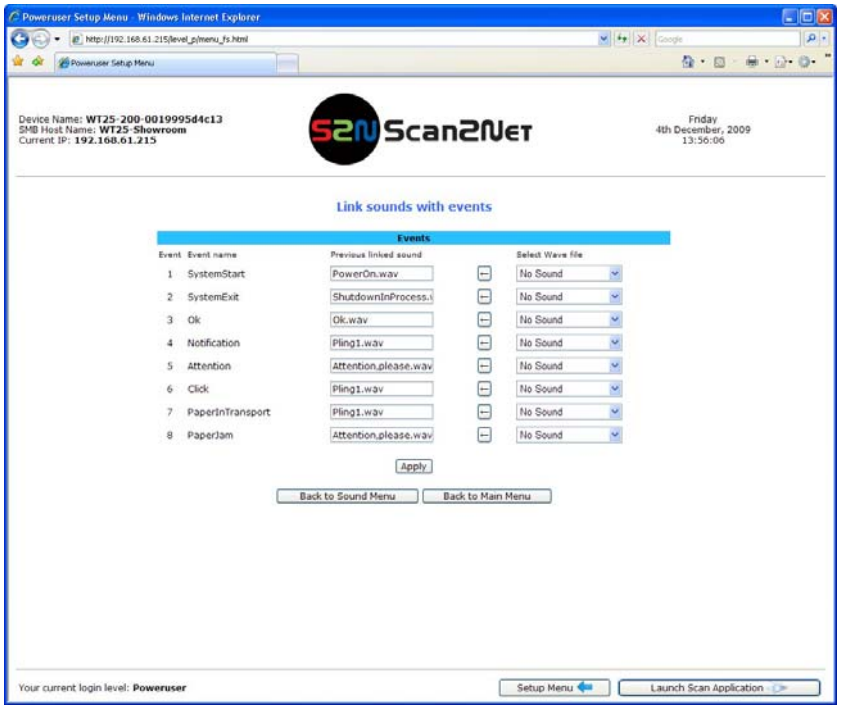
Click on the button Search to search for the desired WAV sound files.

Click on the button Send to upload the files to the scanner.

B.3.3.3 Link Events

A sound can be assigned to various action items. This will be played every time the condition occurs. The default setting can be overwritten.

Click on the button Link Events



Picture 26: Link Sounds to Events screen

The list shows the event and the sound name which is linked to it.

The sound that should replace the current sound can be selected in the next row. Click on the selection arrow to open the list of available sounds.

The selected sound will be linked to the event by clicking the ← symbol.

Click on the button Apply to transfer the changes to the scanner.

Back to Sound Menu returns to the former menu.

Back to Main Menu returns to **Poweruser** main menu (Picture 20).

B.3.4 Firmware Update

The Image Access Customer Service Portal at http://service.imageaccess.de offers downloads of firmware updates for every Scan2Net scanner. As a registered user, login with your personal login name and password.

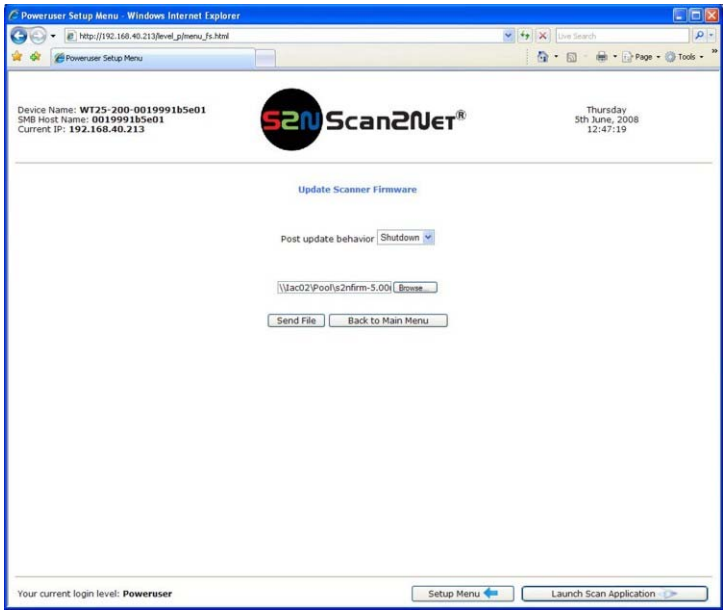
Select **Actions S2N Device Updates** to download the current firmware version. Enter the serial number of your scanner and the version number of the firmware installed on the scanner.

Download the current firmware version to your local PC.

Start the scanner. Select Setup Device and go to the login level Poweruser .

In the main menu screen, locate the section **Updates & Uploads** and click the Update Scanner Firmware button.

Browse your local PC and select the previously downloaded firmware update file.



Picture 27: Firmware Update

After the firmware update is complete the scanner must be rebooted to activate the new firmware.

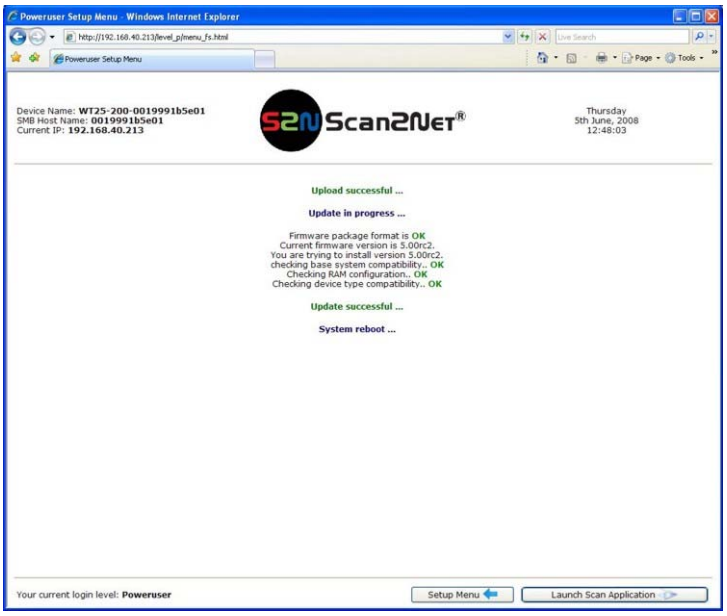
Select “Reboot” in the line **Post update behavior** to reboot automatically after the updating the firmware.

Click the button Send File to update the scanner's firmware.

Important: **Do not switch off** the scanner while executing the firmware update!

The update sequence can last a few minutes. When the update is running, no messages will be displayed on the screen.

After the firmware is successfully updated, the screen displays a summary.



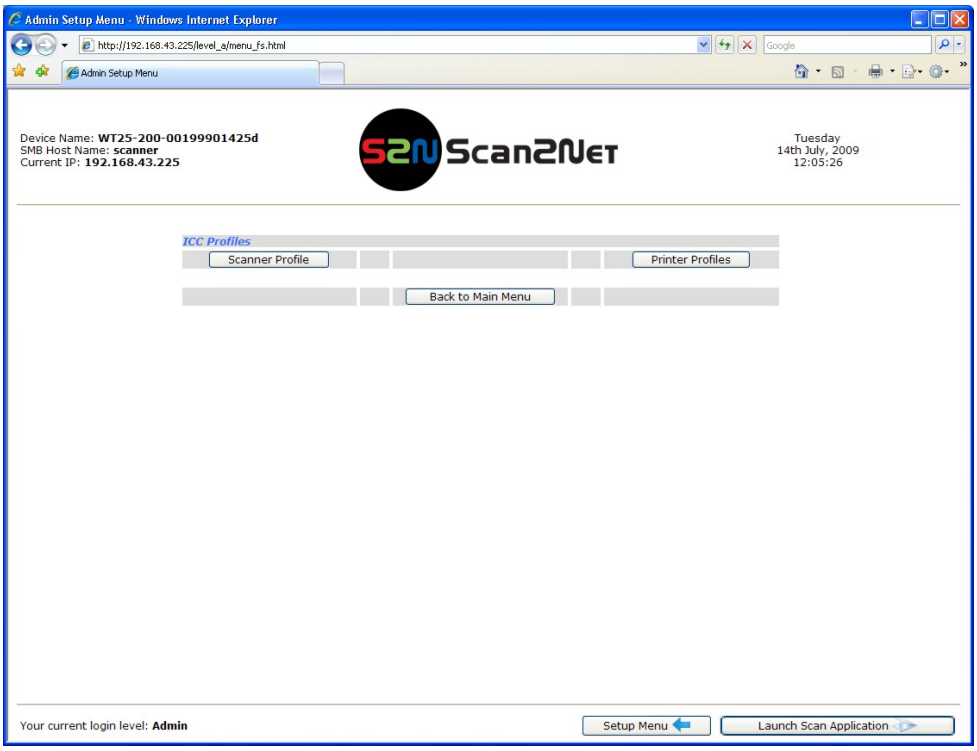
Picture 28: Summary of successful firmware update

The scanner reboots now with factory default settings.

B.3.5 Install ICC Profiles

Find the section **Updates & Uploads** in the **Poweruser** main menu screen and go to ICC Profiles.

Select either Scanner Profile or Printer Profiles.

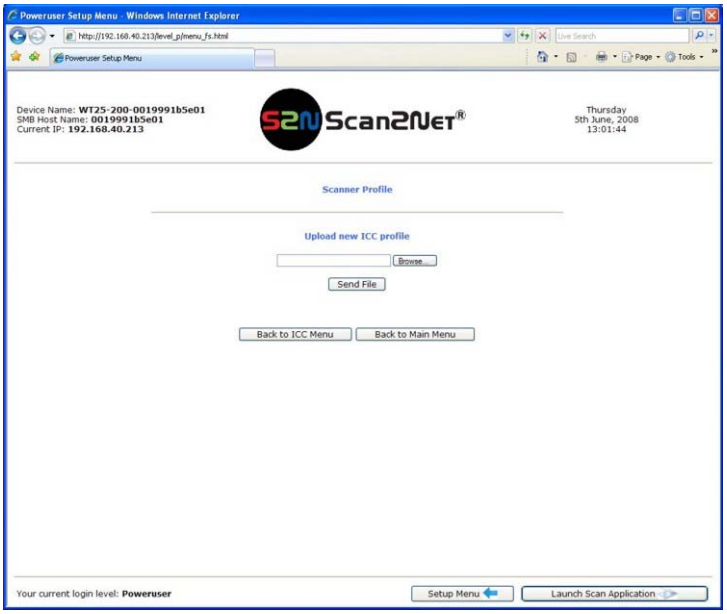


Picture 29: Select ICC Profile

The ICC profiles data will be integrated into the image files. ICC profiles match the color space between scanner and imaging software or the color space between scanner and printer.

By using ICC profiles scanned images can be reproduced with correct adapted colors.

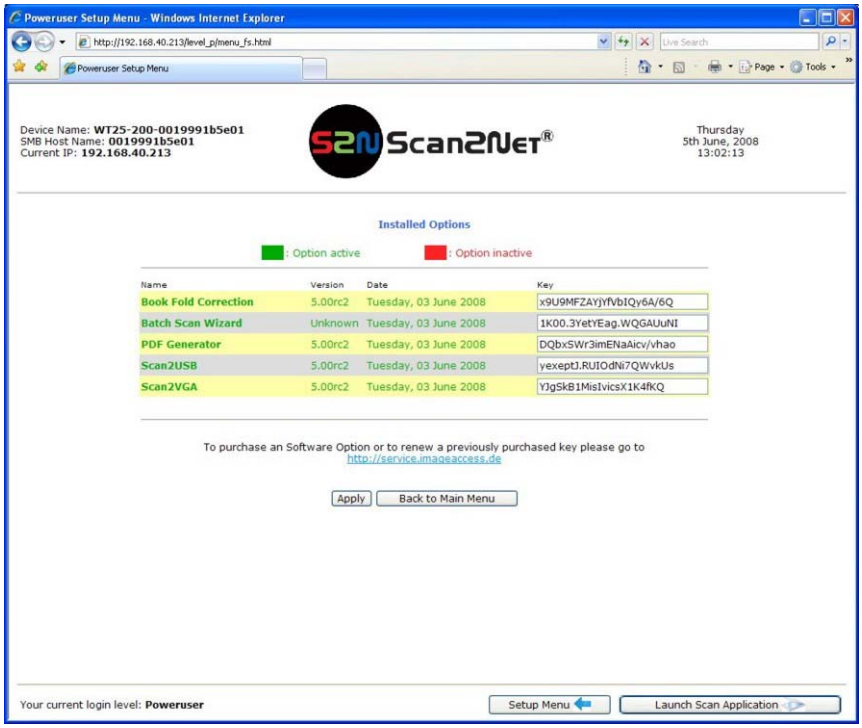
Browse for a new ICC profile and select it. It will replace the previous file.



Picture 30: Upload ICC Profile

B.3.6 Install Option

In the main menu screen, locate the section **Updates and Uploads** and go to Install Options. All option keys that are displayed in green are valid and installed. A new key must be entered completely without blanks or spaces followed by the Apply button. If it does not turn green, the key is invalid or does not belong to this specific scanner or option.



Picture 31: Install Option screen

Note: Option keys are valid only for one option on a specific scanner denoted by its serial number.

If a key is accidentally deleted it can always be obtained again at the Image Access Customer Service portal http://service.imageaccess.de without additional costs.

C Maintenance, Tests and Troubleshooting

C.1 Separating Device Cover from Device Body

Disconnect the power cable before doing any maintenance to the device.

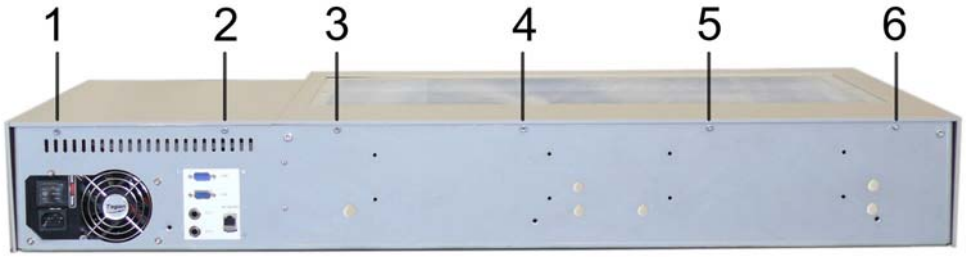
At first remove the glass plate cover. Two hinges hold the glass plate cover at the device cover.

Each hinge has three screws which hold it at the device cover. Use a Phillips screwdriver to remove the two screws on the left and right position. Use an Allen head screw driver, size 2.5 mm, to remove the screw in the middle position of each hinge.

Note: Use the countersunk Allen head screw **only** at the middle position of the hinges!

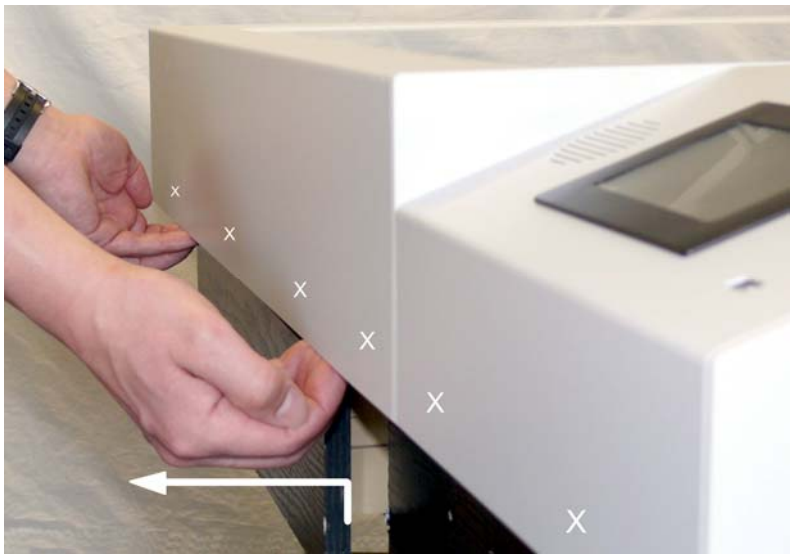
Picture 32: Arrows point on the hinges to be removed

In the next step remove six hexagon head screws at the back side of the device body.



Picture 33: Hexagon head screws to be removed

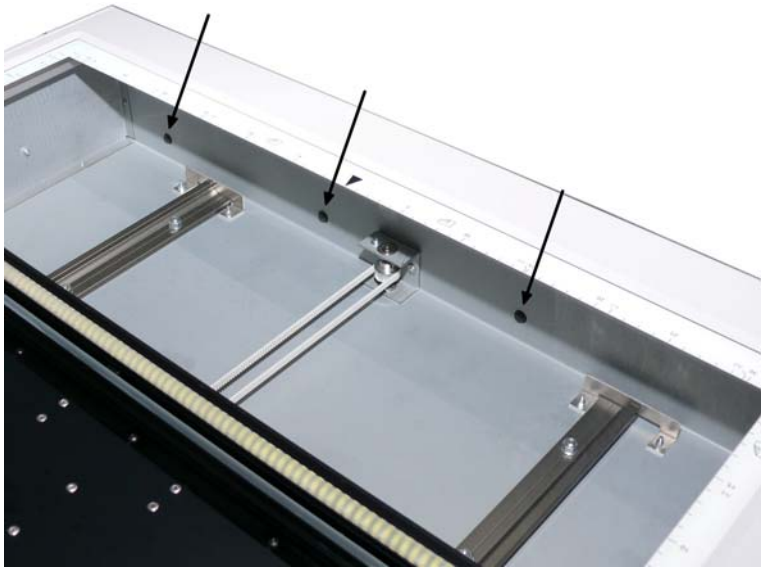
After the six screws have been removed the device cover must be lifted and pulled a little at the front side as shown in the picture below.



Picture 34: Lift and pull the device cover

The device cover has six alignment pins on its front side. For easy orientation the position of the alignment pins are marked in the above picture by the six white crosses.

They are visible when looking from above through the glass plate.



Picture 35: Arrows mark three of six alignment pins

While pulling at the device cover, look through the glass plate and stop pulling when the alignment pins are out of their boreholes.

Hold the device cover at the left and right side and lift it up in the arrow direction as shown in the pictures below.

Picture 36: Lifting the device cover in arrow direction

Picture 37:Separating device cover from device body

Because of the limited cable length it is recommended to place the device cover on the front part of the device body. A second person should hold the device cover for the following steps.

Disconnect the audio cable …

Picture 38: Disconnecting audio cable

… and the signal cable.

Picture 39: Disconnecting the signal cable

After both cables are disconnected place the device cover with the glass plate down onto a flat and stable base.

C.2 Assembling the Device Cover to the Device Body

The device cover is assembled to the device body in reverse order as described in the previous chapter C.1.

First connect the audio cable (Picture 38) and the signal cable (Picture 39) to the touch panel board.

At next slide the device cover onto the device body. Stop shortly before the device cover comes to the back edge of the device body.

Lift the device body at its back side a little …

Picture 40: Lifting the device cover

…and then slide it carefully into its end position.

Picture 41: Device cover in end position

Watch the alignment pins on the front side. They should slide only a little into their boreholes.

C.2.1 Assembling the Glass Plate Cover

The glass plate cover has two adjustable hinges. These hinges avoid an undamped moving of the glass plate cover.

The middle screw allows to set the damping force of the hinge.

Position the hinges of the glass plate cover over the threaded holes. Assemble each hinge by using two Phillips head screws in the left and right borehole.

Fasten the screws by hand. **Do not use an electric tool!**

At next insert the countersunk Allen head screws in the middle borehole. Use an Allen head screw driver, size 2.5 mm, to fasten the screws.

Picture 42: Setting the damping force of the hinge

Fasten the Allen head screws with normal manual strength. Move the glass plate cover slowly up and down while fastening the Allen head screws.

Intention of this is, that the glass plate cover should move easily, but damped.

C.3 Cleaning the WideTEK 25 Scanner

Although the WideTEK 25 scanner is constructed with the focus on a minimum of cleaning requirement, it is needful to clean some parts after a period of using.

C.3.1 Cleaning the Outside of the Glass Plate

It is recommended to clean the outside of the glass plate periodically to ensure constant good scan results.

To clean the glass plate, lift up the glass cover. Use the microfiber cloth which is delivered with the WideTEK 25 scanner or a fluff-free cloth.

Note: Because of the coating of the glass plate always use only a few drops of a mild cleaning fluid with the microfiber cloth.

Moisten the microfiber cloth, then apply a few drops of a mild cleaning fluid and clean the glass plate without pressing the cloth on it .

Use a soft cotton cloth to dry the glass plate after cleaning.

C.3.2 Cleaning the Inside of the Glass Plate

The inside of the glass plate should be cleaned in larger time periods.

To clean the inside it is necessary to remove the device cover from the device body. See chapter C.1 for a detailed description of the necessary steps.

To clean the glass plate use the microfiber cloth which is delivered with the WideTEK 25 scanner or a fluff-free cloth.

Note: Because of the coating of the glass plate always use only a few drops of a mild cleaning fluid with the microfiber cloth.

Moisten the microfiber cloth, then apply a few drops of a mild cleaning fluid and clean the glass plate without pressing the cloth on it .

Use a soft cotton cloth to dry the glass plate after cleaning.

C.4 Scan Test Targets

With the help of this function, the user can scan either a CSTT target or an IT8 target. The targets are used to analyze specific features of the scanner's camera and internal parameters.

Some CSTT test target are delivered with the scanner.

In the Poweruser main menu screen find the section **Adjustments & Support**. Select here Scan Test Targets. Another screen opens.

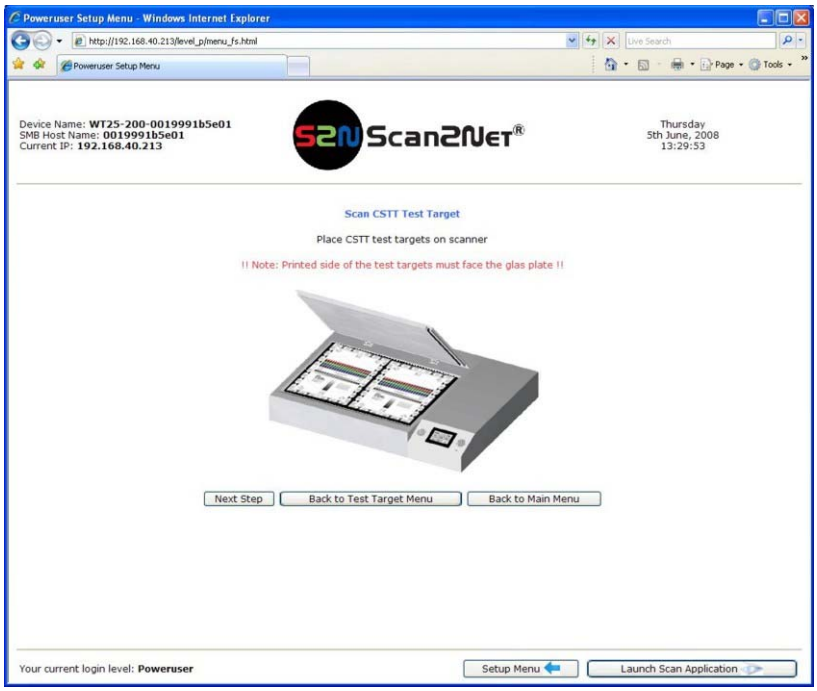
Select here either Scan CSTT Test Target or Scan IT8 Test Target.

C.4.1 Scan CSTT Test Target

When Scan CSTT Test Target is selected, the next screen shows how to position the target on the document table.

Note: Place the CSTT test target with the **printed side** on the glass plate.

The picture on the screen shows the target with the printed side up. This is only to help identifying the test target.



Picture 43: Position of CSTT test target on the glass plate

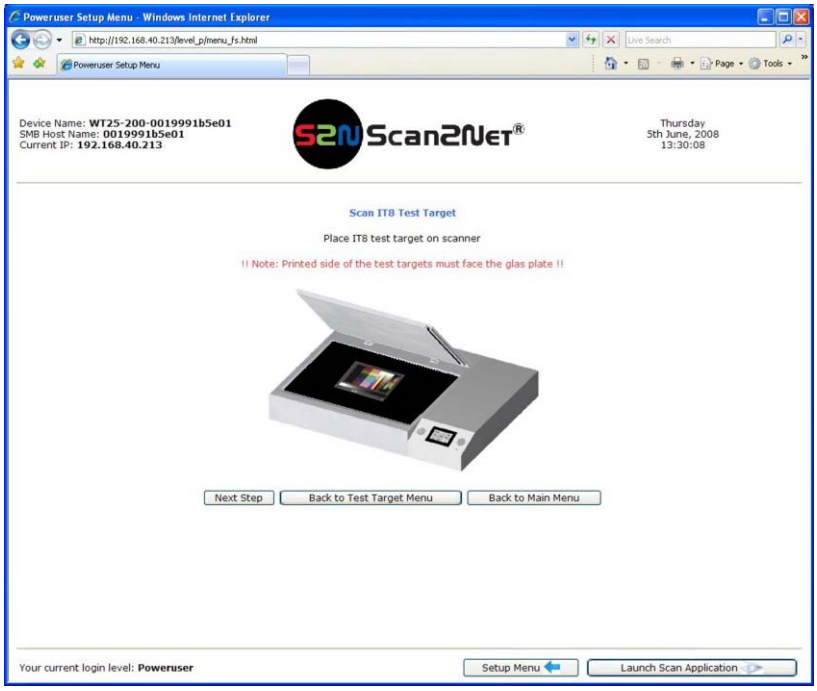
The test targets will be scanned and the image will be saved to a directory which is defined by the user. The saved image can be used for support purposes.

C.4.2 Scan IT8 Test Target

When Scan IT8 Test Target is selected, the next screen shows how to position the target on the document table.

Note: Place the IT8 test target with the **printed side** on the glass plate.

The picture on the screen shows the target with the printed side up. This is only to help identifying the test target.



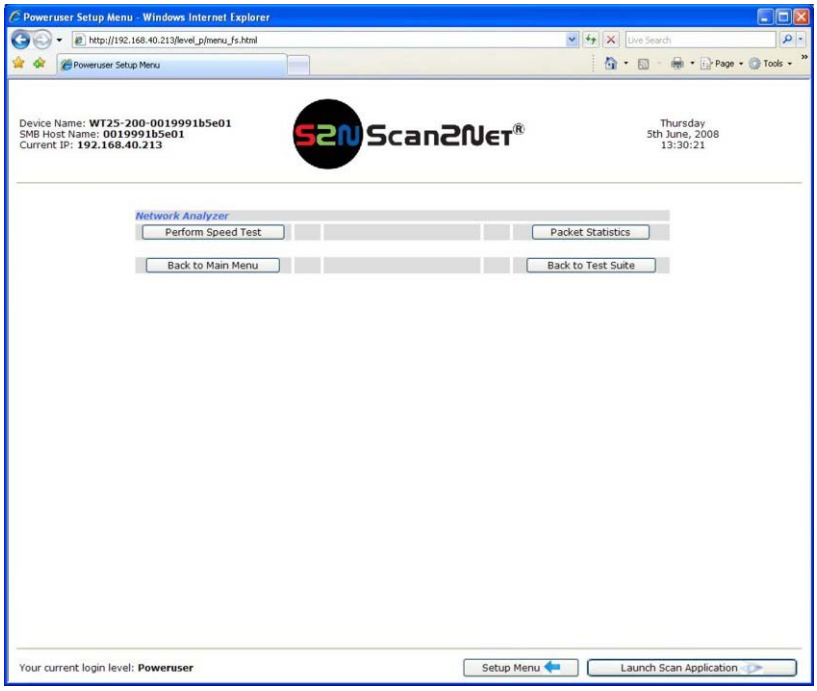
Picture 44: Position of IT8 test target on the glass plate

The test target will be scanned and the image will be saved to a directory which is defined by the user. The saved image can be used for support purposes.

C.5 Network Analyzer

This function provides information about the data transfer speed of the network where the Scan2Net scanner is installed.

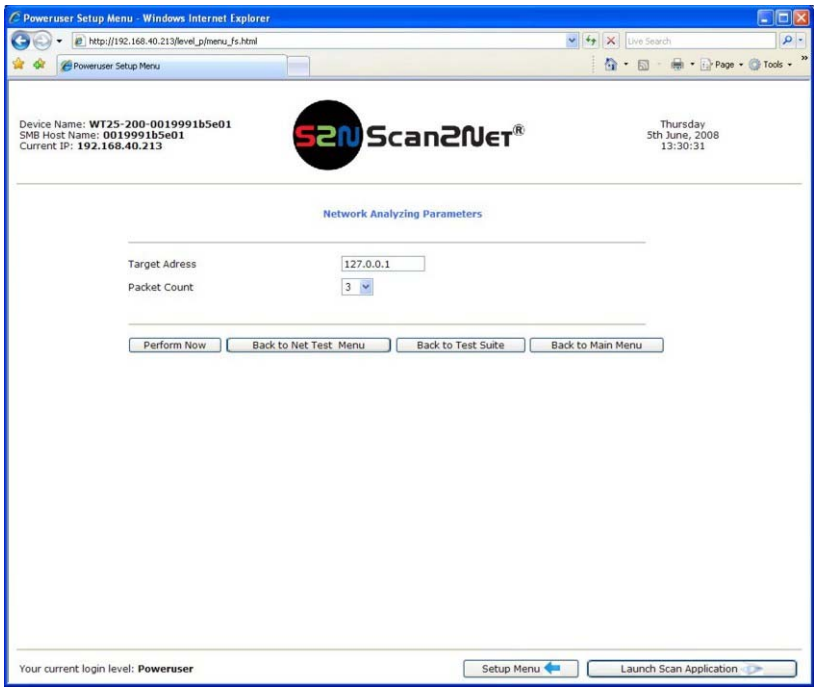
Locate the section **Adjustments & Support** in the Poweruser main menu screen and click the Network Analyzer button.



Picture 45: Network Analyzer screen

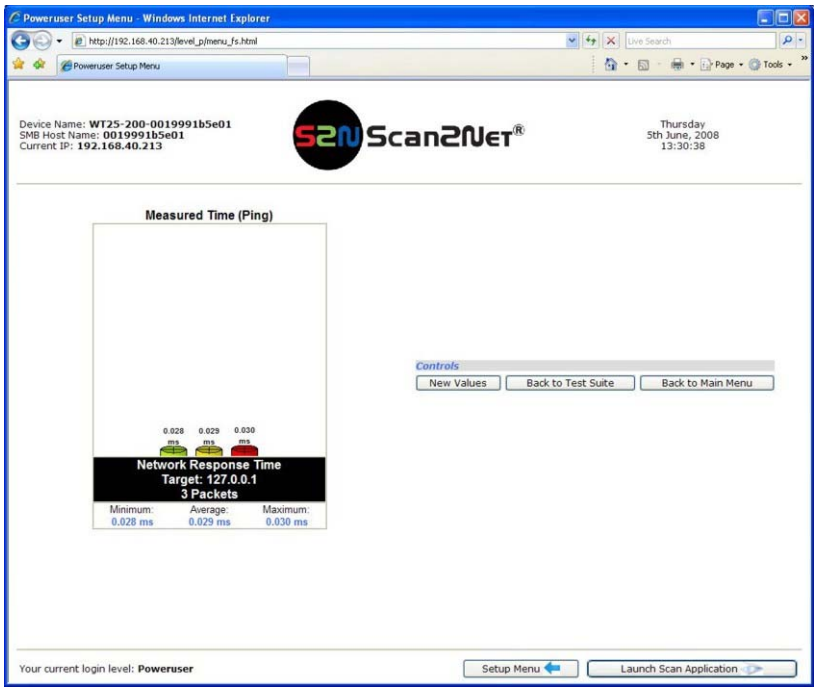
Click on the Perform Speed Test button and enter the IP address of the device which should be the target for the test. Also enter the number of packets that should be sent for testing.

Click the Perform Test button to start the test.



Picture 46: IP address for testing

The test results will be displayed in a diagram.



Picture 47: Network Analyzer test result

C.6 Recovery Function

The recovery function helps to set all device parameters to factory defaults after a fatal system breakdown.

The recovery key is necessary to invoke the recovery procedure.

Picture 48: Recovery Key

A recovery key is delivered with every device, it is marked with the label **Recovery**.

Important: The recovery function resets the IP address to the factory default value of 192.168.1.50. It may be necessary to use the crossover cable and change the network settings on the local computer.

C.6.1 Important Notes Before Recovering to Factory Defaults

The steps described in the following should **only** be executed after a fatal system breakdown!

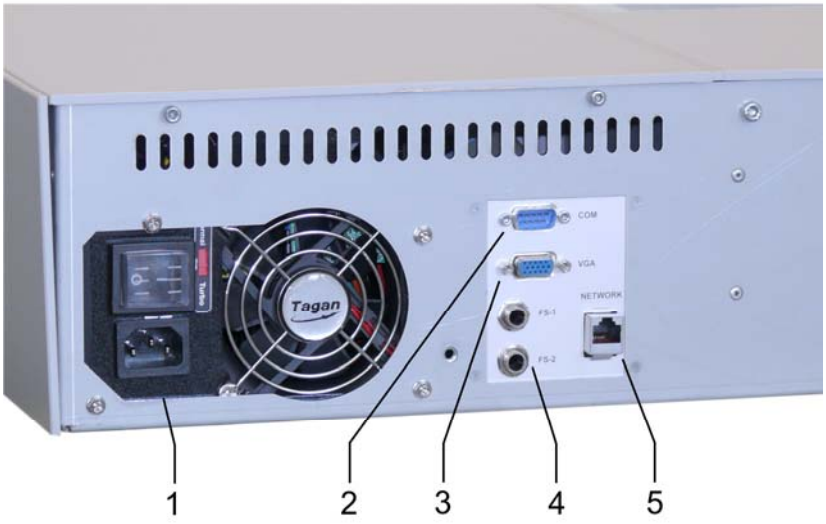
Write down the values for the IP address, subnet mask and gateway of the device before starting the recovery sequence.

After recovering to the factory default values, a **firmware update** has to be executed! Make sure an update file is available on the local computer.

After recovering to the factory defaults, all **adjustment procedures** described in the previous sections have to be executed again!

C.6.2 How to Recover to Factory Defaults

1. Power the device down with the stop button.



1. Power connector and main power switch
2. Serial connector
3. VGA connector
4. Two foot pedal connectors
5. Network cable connector

Picture 49: Connectors on the WideTEK 25

2. Plug the recovery key into the **serial connector** (detail 2 in the above picture) at the connectors panel.

3. Power the device up via the start button.

The device will start and, after it has found the recovery key to be present in the serial port, it will automatically execute the recovery sequence. All viable system data will be restored and necessary repair steps will be taken without the need of any user interaction.

Note: The recovery sequence can last some minutes. While the recovery sequence is running, **no message** will be displayed.

4. When the recovery sequence has finished, the device will power down automatically.

Important: **Do not switch off the device at any time during the recovery procedure!**

5. Unplug the recovery key after the device has powered down.

6. Power up the device and launch the scan application in your browser.

   The IP address of the device will have the factory default value: 192.168.1.50

7. Change the network parameters to the values which were used before running the recovery sequence.

   Select Setup Device ➔ Poweruser. Locate the section **S2N Base Settings** and click the button Network. Enter the values for IP address, subnet mask, and default gateway.

   Click the Apply button. Confirm the following message by clicking the OK button.

   In the next screen, click the Reboot button.

   Reconnect to the device using the new IP address.

8. Select Setup Device ➔ Poweruser. Locate the section **Updates & Uploads** and click the button Update Firmware. Perform a firmware update.

9. After the firmware update, all software adjustments for the device must be performed.

   Select Setup Device ➔ Poweruser. Locate the section **Adjustments & Support** and click the button Adjustments. Perform the adjustments by clicking the appropriate buttons.

C.7 Troubleshooting Matrix

Fields with a light blue background need the power user access level. All other fields are available to all users.

Problem	Possible cause	Action
The touch screen does not show the stand-by message.	No power	Check main outlet, power cord, power-on switch on the left side of the device.
Touching the touch screen does not power up the device.	Connector failure, software glitch …	Switch power off for at least 10 seconds. Retry after touch screen is illuminated again.
Touching the STOP button on the touch screen does not power down the device.	Internal software hangs, application hangs …	End all applications and retry. If problem persists, touch the **STOP** button for at least 10 seconds. Power up again.
Image is darker than expected.	The target used for white balance is much brighter than the scanning target.	Go to the Adjustments function and modify the Brightness Correction setting.
Image is brighter than expected.	The document is much brighter than the target used for white balance.	Go to the Adjustments function and modify the Brightness Correction setting.
Image has horizontal stripes or streaks.	Improper white balance.	Exercise the White Balance procedure.
Image shows a color shift towards red (tint)	The target used for white balance is more blue than the scanning target.	Go to the RGB adjustments and lower the gain on red.
Image shows a color shift towards blue (tint)	The target used for white balance is more red than the scanning target.	Go to the RGB adjustments and lower the gain on blue.
Image shows a color shift towards red (tint)	The scanner receives significant amounts of infrared light (sun or spot lights) not visible to the human eye.	Change position, close blinds, dim or shut off any bright spotlights.

C.8 Error Codes and Warnings

The scanner does report error conditions on the display and through the API. Some errors are only sent to the API.

A green problem description signals that operation of the scanner is still possible although the error will have an influence on the behavior or quality of the scanner.

A problem description in red marks an errors which will stop the scanner and inhibits further scanning.

C.8.1 Error Codes

Error #	Error message shown in the display	Error message sent to application	Problem description
1		Scanner in use.	An attempt to access the scanner was made from a different application.
2		Invalid session ID.	An attempt to access the scanner with an invalid session ID was made.
4		Invalid password	The stop button was pressed during the operation.
5	E05 S2N BOARD	S2N board failure	The S2N board is either not found or found defective. Make sure board is sitting correctly on the motherboard.
7	USER BREAK	Stop button pressed.	The stop button was pressed during the operation.
8		User timeout	The function ended because of a time out
9		Warming up	The device is still warming up and cannot be used.
10		Invalid setting value.	The value sent to the device is invalid.
11		Setting does not exist.	The settings does not exist.
12		Invalid user docsize.	The size of the user format is invalid.
14		Invalid resolution or color mode.	Either the resolution or the color mode is invalid.
20	E20 MOTOR 1 (O) SCAN DRIVE	Motor 1 (Scan drive): End switch permanently open.	The home position switch is permanently open. The mechanics of the corresponding motor could be blocked or the switch/cable is defective.
21	Error 21 Motor 1: Transport locked	Motor 1 / PCI 1 (Box drive): Transport locked	

Error codes, part 2

Error #	Error message shown in the display	Error message sent to application	Problem description
30		File format not supported.	The specified file format is not supported or it is invalid in combination with the color mode.
31		Preview not possible	The application specified an invalid preview scale. Not all scale factors are allowed with all image sizes.
32		Invalid color conversion	The application changed the color depth between scanning and image transfer and a conversion between these modes is not possible. Example: scan in binary, then changed color mode to truecolor.
33		No image available	The application attempted to get an image from the scanner and there was no scan since the device was turned on.
55	E55 WRONG S2N HW CCD PORTS	Wrong S2N board detected (not enough CCD ports)	The S2N board found is not the right one for this device. Error can occur after a repair/exchange. Exchange with correct board.
56	E56 WRONG S2N HW REVISION NOT OK	Wrong S2N Board detected (Revision not OK)	The S2N board found is not the right one for this device. Error can occur after a repair/exchange. Exchange with correct board.
56	Error 56: S2N Board: wrong revision	Wrong S2N Board detected (Revision not OK)	The S2N board found is not the right one for this device. Error can occur after a repair/exchange. Exchange with correct board.
60	Error 60: General camera error	General camera error.	General error on the CCD camera board. Check power, cables and S2N-PCI board.
61	Error 61: Camera 1 failed	Camera 1 failed	Initializing of camera 1 failed. Check power, cables and S2N-PCI board.
62	Error 62: Camera 2 failed	Camera 2 failed.	Initializing of camera 2 failed. Check power, cables and S2N-PCI board.
65	Error 65: Camera 1 data bus error	Camera 1 data bus error.	Test data transfer to camera failed. Check cables / connectors to camera 1 and S2N-PCI board.
66	Error 66: Camera 2 data bus error	Camera 2 data bus error.	Test data transfer to camera failed. Check cables / connectors to camera 2 and S2N-PCI board.
69	Error 69: ADC error camera 1	Camera 1 adc error.	Test data transfer through analog digital converter failed. Check cables / connectors to camera 1.

Error codes, part 3

Error #	Error message shown in the display	Error message sent to application	Problem description
70	Error 70: ADC error camera 2	Camera 2 adc error.	Test data transfer through analog digital converter failed. Check cables / connectors to camera 2.
75		General keyboard error	General keyboard error. Check keyboard and cables.
80	E80 BAD LAMP CONFIG	Bad lamp config	
81	E81 BAD DEVICE CONFIG	Bad device configuration	
99		Internal error.	The firmware has detected an internal error of unknown cause.

C.8.2 Warnings

Warning #	Warning shown in the display	Warning sent to application	Problem description
144		Light level is low	The light level is found to be low during the white balance function.
145	Camera adjustment required	Camera adjustment required	
160	W160 NO WHITE BALANCE DATA	No white balance data	No white balance data was found. Perform white balance.

C.8.3 Information

Info. #	Information shown in the display	Information sent to application	Description
200	CREATING RECOVERY PART..	Creating Recovery Partition	While creating the recovery partition, the scanner can not be accessed.

D Technical Data

D.1 Scanner Specifications

Optical System

Maximum Document Size	25 x 17,7 inch / 635 x 420 mm
Optical Resolution	1200 x 600 dpi
Sensor Type:	Two tricolor CCDs, encapsulated and dust-proof
	12bit grayscale (internal resolution)
	36bit color (internal resolution)
Sensor Resolution:	45.600 pixels (2x 22.800)
Scan Modes:	1bit Black/White
	8bit Grayscale
	24bit Color, 8bit indexed

Illumination:

Light Source:	Two lamps with white LEDs
Warm-up Time:	None
Temperature Dependence:	None
UV / IR Emission	None
Lifetime	50.000 hours scanning time

D.2 Ambient Conditions

Operating Temperature	+5 to +40° Celsius
Storage Temperature	0 to +60 °Celsius
Relative Humidity	20 to 80% (non-condensing)
Noise Level	48 - 53 dB(A) (Operating) 33 dB(A) (Stand-by)

D.3 Electrical Specifications

This device is Energy Star compliant.

Voltage	100–240V AC
Frequency	50/60 Hz

Power Consumption

Stand-by	0.1 W
Start Procedure	90 W
Ready to scan, lamps off	70 W
Scanning	105 W

D.4 Dimensions and Weight

Scanner outer dimensions	160 x 1026 x 782 mm (H x W x D) 6,3 x 40,3 x 30,8 inch
Weight of Scanner	41 kg
Weight of Transport Box	35 kg
Dimensions of fully packed Transport Box	400 x 1200 x 960 mm (H x W x D) 15,75 x 47,25 x 37,8 inch
Total shipping weight	76 kg

D.5 CE Declaration of Conformity

The undersigned, representing the manufacturer:

Image Access GmbH

Hatzfelder Strasse 161 – 163

42281 Wuppertal, Germany

herewith declares that the

Product:	**WideTEK 25 Scanner**
Model Designation:	**WT25 –XXX** (XXX represents the device version number and configuration details)
Serial number:	All

is in conformity with the following European standards and IEC directives:

EMC Directive 2004/108/EEC as per:

EN 55022:1998 + A1: 2000 + A2:2003

EN 61000-3-2:2000 + A2:2005

EN 61000-3-3:1995 + A1:2001

EN 55024:1998 + A1:2001 + A2:2003

FCC 47 CFR Ch.1 Part 15

Safety:

Low Voltage Directive (Safety) 2006/95/EEC as per

IEC 60950-1:2001

EN 60950-1:2001

UL 60950-1

CSA C22.2 No 60950-1-03

Wuppertal, 02.06.2008

Thomas Ingendoh , President and CEO

D.6 FCC Declaration of Conformity

Responsible party:

Image Access GmbH

Hatzfelderstrasse 161 – 163

42281 Wuppertal, Germany

Product: **WideTEK 25**

Model Designation: **WT25 –XXX**
(XXX represents the device version number and configuration details)

For unique identification of the product configuration, please submit the 12-digit serial number found on the product to the manufacturer.

This device complies with Part 15, Class B of the FCC Rules. Operation of this product is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

For your notes