WideTEK 36

Setup and Assembly Manual

This device is ENERGY STAR compliant.

© 2010 – 2013 by Image Access GmbH, Wuppertal, Germany.
Printed in Germany. All rights reserved.
Reproduction in whole or in part in any form or medium without express written permission of Image Access is prohibited.
Scan2Net®, WideTEK® and Bookeye® are registered trademarks of Image Access.
All other trademarks are the property of their respective owners.

Image Access reserves the right to change the described products, the specifications or documents at any time without prior notice.
For the most recent version, always check our web site www.imageaccess.de or www.imageaccess.us or the customer service portal at portal.imageaccess.de

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 the WideTEK 36, 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 36 has been delivered.

For this reason, we ask you to read this manual attentively before starting with the assembly procedure. By doing so, you will avoid errors from the beginning and you will be able to control all functions 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 safe operation of the WideTEK 36 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 the WideTEK 36, 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 to prevent 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://portal.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 setup. 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 precision optical instrument and should be handled accordingly.

Note: It is recommended to always use the WideTEK 36 in combination with the floor stand.

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

Section C describes cleaning procedures, troubleshooting procedures, and test scan generation.

Section D shows all technical data and necessary declarations.

Version History

Version	Published in	Content/Changes/Supplements
A	February 2007	Preliminary version. Description of the device elements. Description of assembling steps. Description of Scan2Net Firmware Adjustment Procedure. Description of Recovery Function.
B	May 2007	Additional information concerning cleaning, tests and troubleshooting.
C	August 2007	Some minor modifications in the text, some new screenshots because of new firmware release.
D	August 2008	New screenshots because of release of S2N firmware version 5. Minor modifications in detail descriptions. Table D.4 corrected. Changed values for the device weight and total shipping weight.
E	May 2009	Some minor supplements in detail descriptions. Some screenshots modified.
F	December 2009	Error code table supplemented, tables of warnings and information have been added.
F2	January 2010	Some minor corrections in details description. Chapter D.3 Electr. Spec. New value for stand-by consumption, another power supply is used.
F3	July 2010	Chapter B.3.8 renumbered to B.3.9. **New:** Chapter B.3.8 Streak Compensation
F4	June 2011	Additional information concerning the execution of a white balance adjustment after a firmware update in chapters B.3.4 and B.3.7.
F5	December 2011	Update Technical Data.
F5b	February 2013	Update Copyright information with new trademarks and additional web address.

Table of Content

Introduction ---- 4

About this Manual ---- 5

Version History ---- 6

A Hardware Setup ---- 14

A.1 Content on Delivery....14
A.1.1 Contents of Floor Stand Box 15
A.1.1.1 List of Assembling Material and Tools 15
A.1.2 Floor Stand Overview 16
A.1.3 Parts of Floor Stand 17
A.2 Assembling the Floor Stand 18
A.3 Combining Floor Stand and Scanner....21
A.4 Connecting to the Power Source....25
A.4.1 Connectors at the Scanner 26
A.5 Powering up the WideTEK 36 27
A.6 WideTEK 36 Touch Panel 27
A.6.1 Starting the WideTEK 36 from Stand-By Mode 27
A.6.2 Turning-off the WideTEK 36 28
A.6.3 The Help Function 28
A.7 Navigating through the Screens 29
A.7.1 How to Enter or Change Values 29
A.8 IP Address Setup 30
A.8.1 IP Address Setup by Touch Panel 30
A.9 Optical Adjustment....32
A.9.1 White Balance 32
A.9.1.1 Helpful information about the white balance adjustment 32
A.9.1.2 Performing the White Balance Adjustment 33

Table of Content, part 2

B Software Setup ---------- 34

B.1 Start Screen of the Scan2Net User Interface 34

B.2 Setup Menu 35

B.2.1 Selecting the Login Level 35

B.3 Poweruser Login Level 36

B.3.1 Setup Network IP Address 37

B.3.2 Adjust Time & Date 38

B.3.3 Sound Control 39

B.3.3.1 Set Volume 40

B.3.3.2 Wave Files 41

B.3.3.3 Link Events 42

B.3.4 Firmware Update 43

B.3.5 Install ICC Profiles 45

B.3.6 Install Option 47

B.3.7 White Balance 48

B.3.8 Streak Compensation 50

B.3.9 Brightness Correction 51

C Cleaning, Test and Troubleshooting ---------- 52

C.1 Cleaning the Transport Drums 52

C.2 Cleaning the Glass Plate 54

C.3 Replacing the Glass Plate 54

C.4 Scan Test Targets 59

C.4.1 Scan CSTT Test Target 59

C.4.2 Scan IT8 Test Target 60

C.5 Network Analyzer 61

C.6 Recovery Function 62

C.6.1 Important Notes Before Recovering to Factory Defaults 62

C.6.2 How to Recover to Factory Defaults 63

C.7 Error Codes 66

C.8 Warnings 68

C.9 Information 68

Table of Content, part 3

D Technical Data---------- 69

D.1 Scanner Specifications.....69

D.2 Ambient Conditions.....69

D.3 Electrical Specifications.....70

D.4 Dimensions and Weight 70

Table of Pictures

Picture 1: Transport box opened 14
Picture 2: Floor stand box opened 15
Picture 3: Assembling material 15
Picture 4: Technical drawing of floor stand 16
Picture 5: Floor stand components 17
Picture 6: Side pillar in foot profile 18
Picture 7: Traverse inserted into foot bracket 18
Picture 8: Inserting screws with washer 19
Picture 9: Bottom and side components assembled 19
Picture 10: Top bracket on vertical leg 20
Picture 11: Upper traverse inserted 20
Picture 12: Inserting the rod 21
Picture 13: Two persons lifting the scanner out of the transport box 21
Picture 14: Lift the scanner to remove the foam rubber element 22
Picture 15:Removing foam rubber element and cardboard element 22
Picture 16: Bottom side, front side left 23
Picture 17: Bottom side, back side left 23
Picture 18: Fastening the scanner onto the floor stand 23
Picture 19: WideTEK 36 placed on floor stand, ready to use 24
Picture 20: Connectors at WideTEK 36 26
Picture 21: Start menu screen 27
Picture 22: Touch panel while shut down in progress 28
Picture 23: Keyboard with capital letters 29
Picture 24: Keyboard with lower case letters 29
Picture 25: Self Test 1 menu 30
Picture 26: Network setup 31
Picture 27: Numeric key pad 31
Picture 28: Confirm changes 31
Picture 29: White Balance screen 33
Picture 30: Progress indicator 33

Table of Pictures, part 2

Picture 31: White balance result 33
Picture 32: Start screen 34
Picture 33: Login level screen 35
Picture 34: Poweruser main menu 36
Picture 35: Network parameters of the scanner 37
Picture 36: Adjust Time and Date Screen 38
Picture 37: Sound System screen 39
Picture 38: Volume level displayed 40
Picture 39: List of sound files 41
Picture 40: Link Sounds to Events screen 42
Picture 41: Firmware Update 43
Picture 42: Summary of successful firmware update 44
Picture 43: ICC Profile screen 45
Picture 44: Upload ICC Profile screen 46
Picture 45: Embed ICC profile 46
Picture 46: Install Option screen 47
Picture 47: Click the marked button 48
Picture 48: Select „White Balance“ 48
Picture 49: White Reference Target on document table 49
Picture 50: Streak compensation 50
Picture 51: Selecting “Brightness Correction” 51
Picture 52: Selecting the correction factor 51
Picture 53: Self Test 1 52
Picture 54: Transport drums at front and back 53
Picture 55: Hexagon screws at WT 36 backside 54
Picture 56: Hexagon head screw at left side of housing 54
Picture 57: Lifting the main cover 55
Picture 58: Placing the main cover 55
Picture 59: Audio connector 55
Picture 60: Sensor connector 55

Table of Pictures, part 3

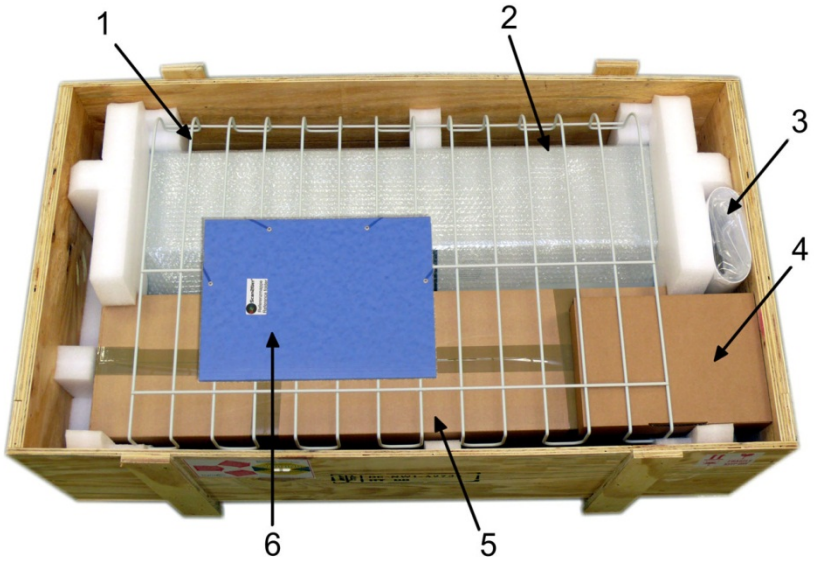
Picture 61: Controller connector 56
Picture 62: Cable connector 56
Picture 63: Screw at back, left side 57
Picture 64: Screw at back, right side 57
Picture 65: Screw at front, left side 57
Picture 66: Screw at front, right side 57
Picture 67: Holding the glass plate rack 58
Picture 68: Removing the glass plate rack 58
Picture 69: Position of CSTT target on the document table 59
Picture 70: Position of IT8 test target on the document table 60
Picture 71: Network Analyzer screen 61
Picture 72: IP address for testing 61
Picture 73: Recovery Key 62
Picture 74: Position of gap on right side 63
Picture 75: Position of gap on left side 63
Picture 76: Moving the compensator plate upwards 63
Picture 77: Compensator plate on document table 64
Picture 78: Compensators lifted 64
Picture 79: Inserting recovery key 64
Picture 80: Connectors on rear panel 64

This page intentionally left blank

A Hardware Setup

A.1 Content on Delivery

The scanner is delivered in a wooden transport box. The transport box also contains the disassembled floor stand in a separate cardboard box and the paper catch basket.



Picture 1: Transport box opened

1: Paper catch basket

2: Scanner

3: White Reference Target

4: Box with cable set and accessories.

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 front panel prior to the first use.

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

Two power cables. US and European standard. Connects the scanner to the wall outlet.

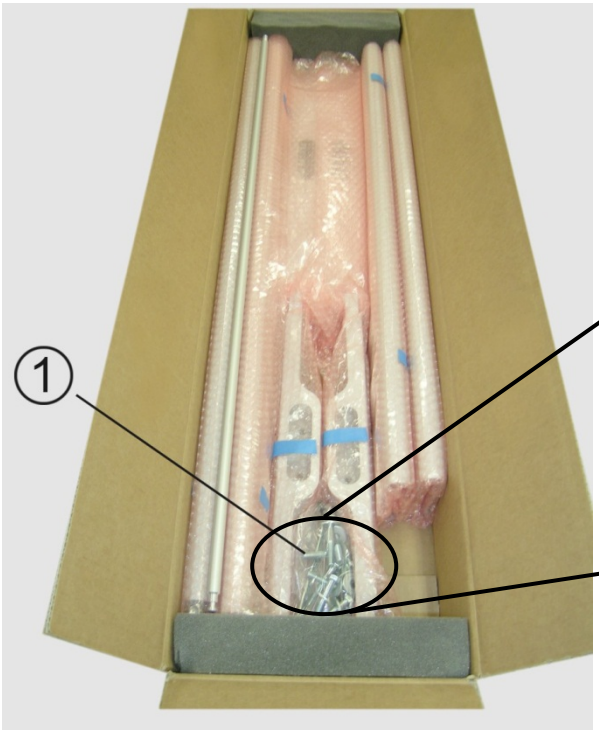
5: Floor stand in separate cardboard box (optional)

6: Folder with CSTT-1 reference targets and the manuals.

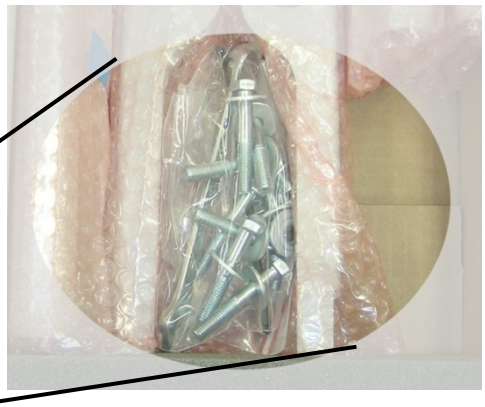
Please note: Keep the wooden transport box and the cardboard box for future use! In case of guarantee the scanner must be sent back in the original transport box to avoid transport damages.

A.1.1 Contents of Floor Stand Box

The cardboard box of the floor stand contains all screws and washers, as well as the tools to assemble the floor stand, in a separate plastic bag.



Picture 2: Floor stand box opened



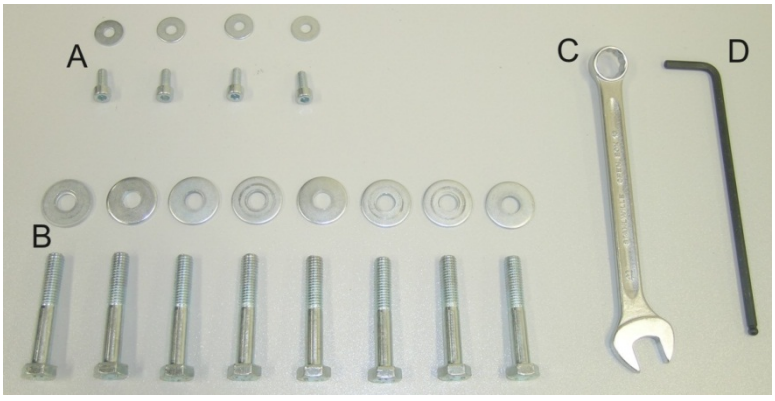
Picture 3: Assembling material

1: Plastic bag with assembly material

The plastic bag contains all screws, washers and tools to assemble the floor stand.

A.1.1.1 List of Assembling Material and Tools

A 4x screws DIN 912 M5x10
4x washer DIN 9021 – 5.3



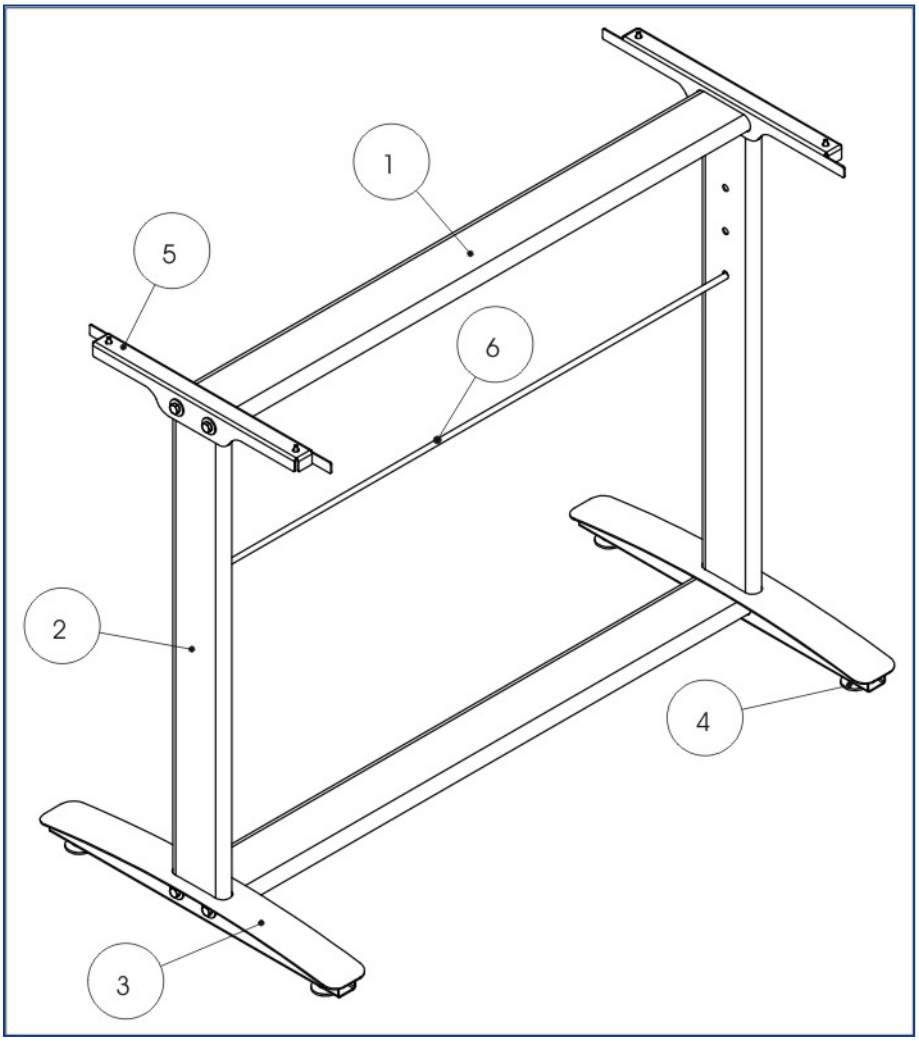
C Combination wrench, size 13

D Allen wrench size 4

B 8x screws ISO 4016 – M8x50x22-WS
8x washer DIN 9021 – 8.4

A.1.2 Floor Stand Overview

The engineering drawing below shows all major elements of the floor stand.



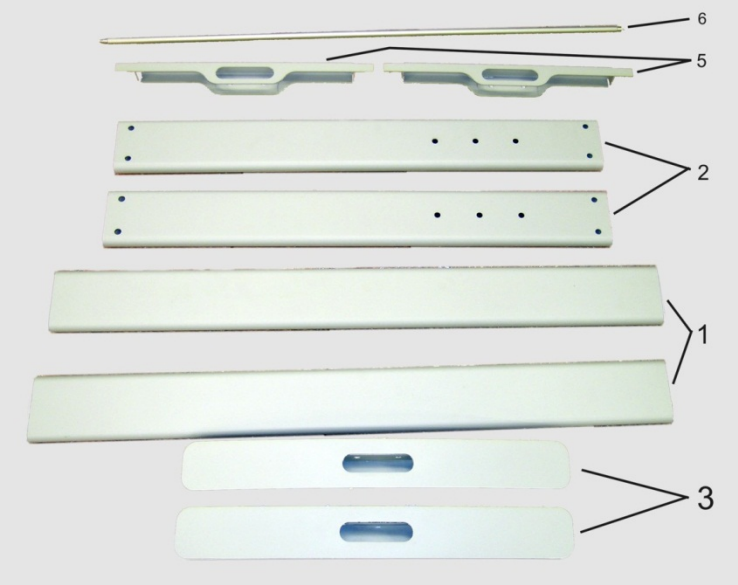
Picture 4: Technical drawing of floor stand

The floor stand is built out of five different components and one round rod.

No	Qty	Description
1	2	Horizontal traverse. This part is used on the top as well as on the bottom.
2	2	Vertical leg. This part is used on the left as well as on the right side.
3	2	Foot bracket. This preassembled part is used on the left and right side.
4	4	Adjustable feet. These are preassembled to the foot bracket.
5	2	Top bracket: This part is used on the left and right top side.
6	1	Horizontal rod. This part supports the paper exit basket.

A.1.3 Parts of Floor Stand

Take all parts out of the box and place them as shown below and check for possible damages.



Picture 5: Floor stand components

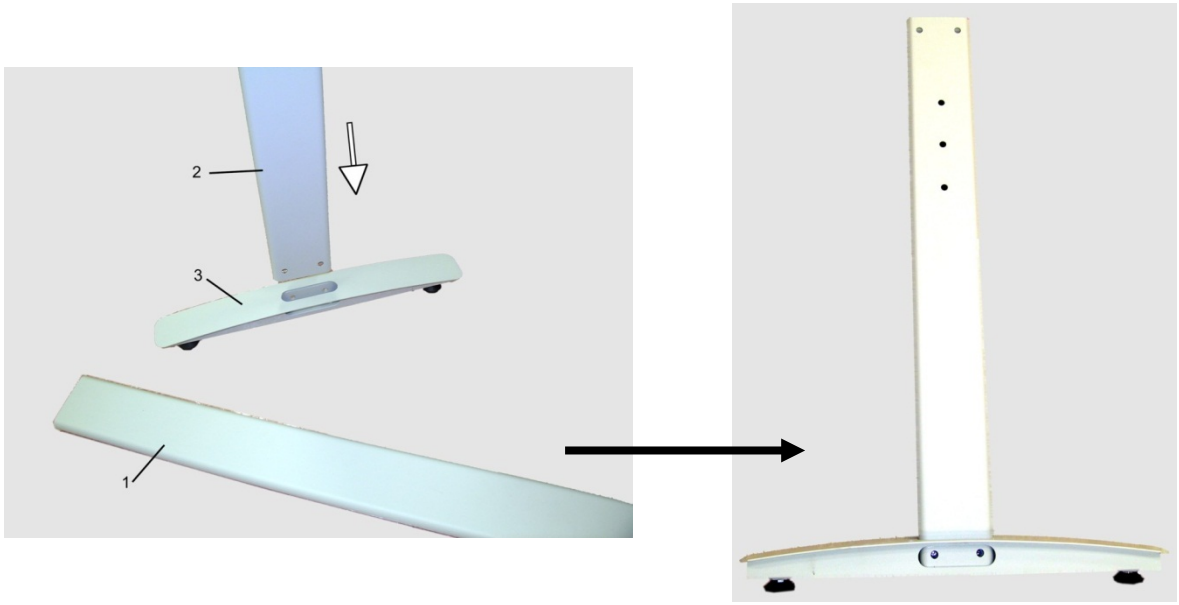
The numbers in the picture above correspond to the numbers in the technical drawing.

A.2 Assembling the Floor Stand

Start with the foot profile (component #3), the side pillar (component #2), and the traverse (component #1).

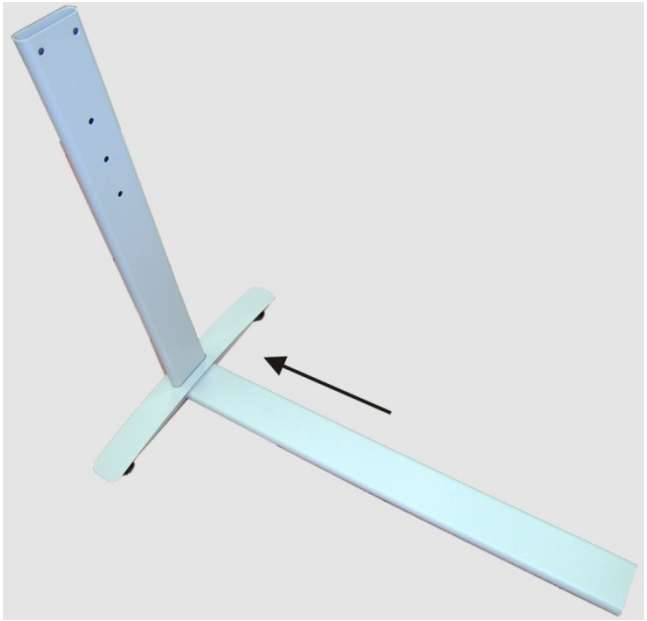
Note: The three boreholes on the vertical leg (part #2) that are only on one side must face to the inner side of the floor stand. They should also be in the upper part of the leg. The technical drawing illustrates the correct position.

First insert a vertical leg into a foot bracket. The brackets have a cutout for the traverse. The foot brackets are designed symmetrically, therefore either one fits left and right.



Picture 6: Side pillar in foot profile

Next, insert the traverse as shown in the picture below.



Picture 7: Traverse inserted into foot bracket

Fasten the three components with two screws ISO 4016 – M8x50x22-WS. Place a washer on each screw.

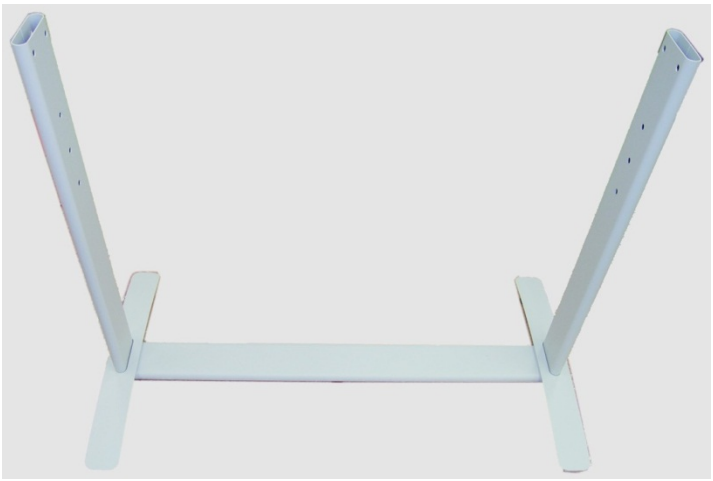
Picture 8: Inserting screws with washer

Tighten the screws with the combination wrench, size 13, which comes with the floor stand.

Note: All screws should only be hand-tightened at first. The components should have a little play until all parts are assembled.

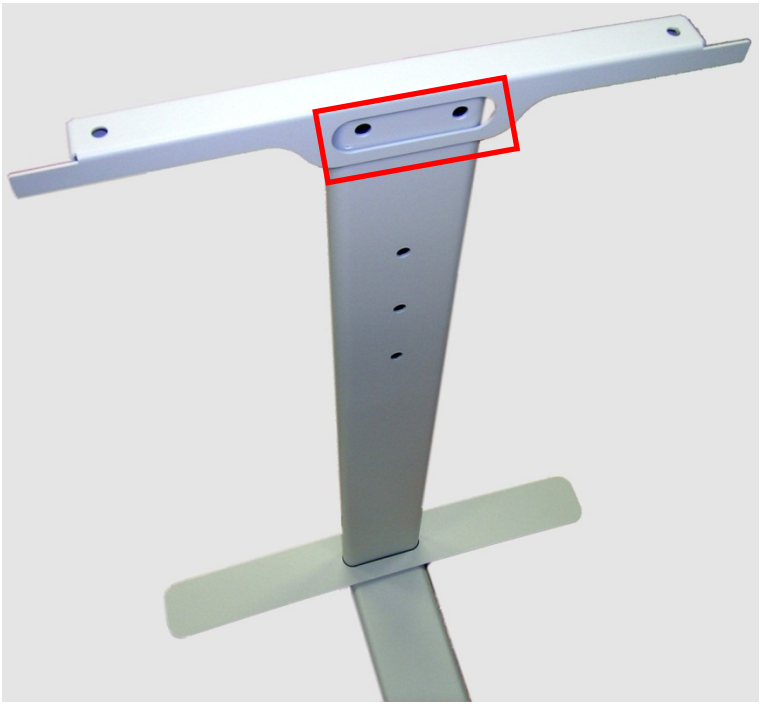
Repeat the steps described above with the second foot bracket and the second vertical leg.

Upon completion, the floor stand should look as shown in the picture below.



Picture 9: Bottom and side components assembled

Place the top brackets on the vertical legs. The oval cut-out must face to the inner side.



Picture 10: Top bracket on vertical leg

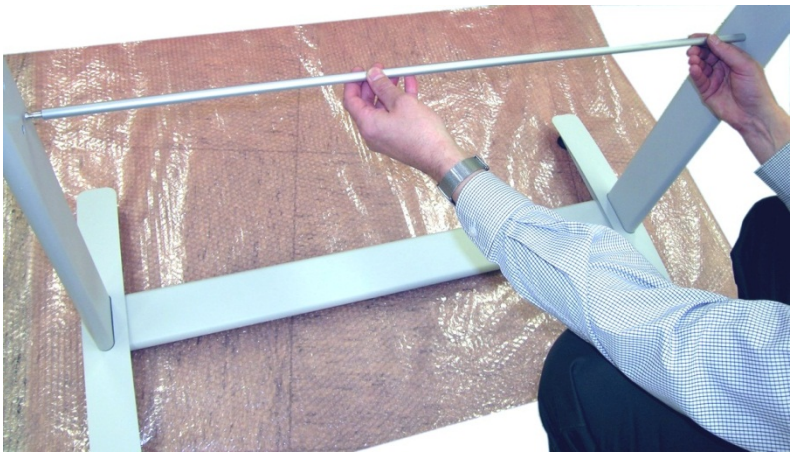
Insert the second traverse between the side legs.

Picture 11: Upper traverse inserted

Assemble the traverse, the top brackets and the legs with two ISO 4016 – M8x50x22-WS screws and a washer on each side.

Tighten all screws on the floor stand with the combination wrench, size 13.

Finally, insert the rod between the side legs. This rod supports the paper output tray. It has three positions for varying tray positions.



Picture 12: Inserting the rod

A.3 Combining Floor Stand and Scanner

After assembling the floor stand, the WideTEK 36 scanner can easily be placed on it in a safe position.

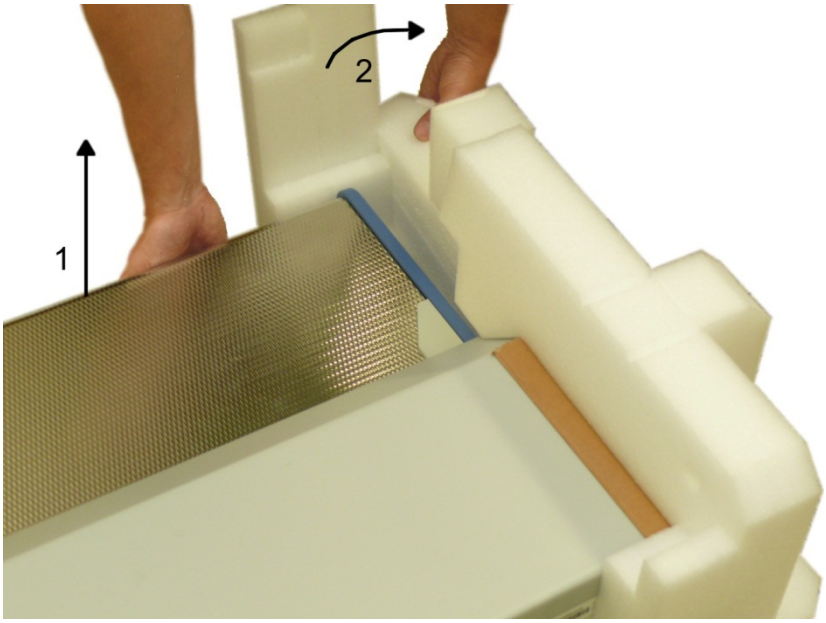
Note: For safety reasons, the scanner should be handled by two persons.

The transport box has notches at each corner in order to lift the scanner easily out of the box.

Picture 13: Two persons lifting the scanner out of the transport box

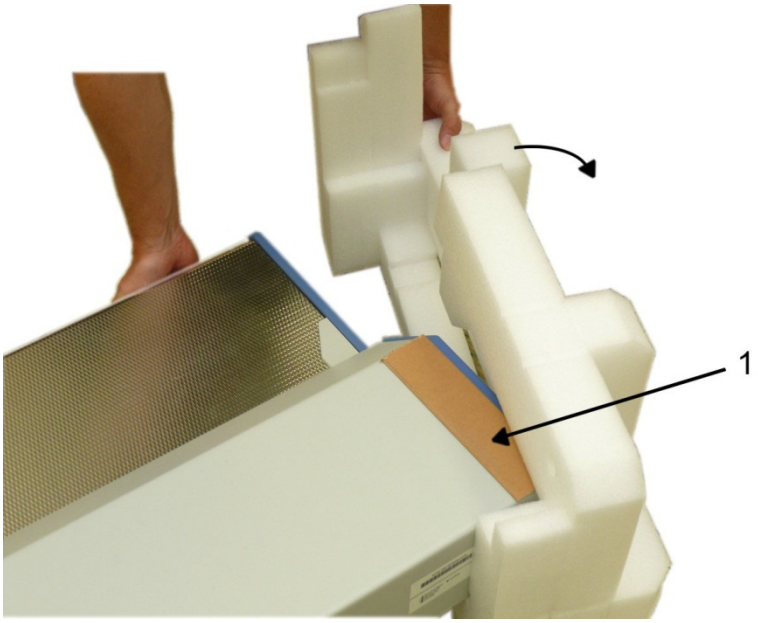
Place the scanner on the ground for the next steps.

To remove the foam rubber elements, lift the scanner on one of its small sides (Figure 1, Picture 14) and turn the foam rubber element sideward (Figure 2, Picture 14).



Picture 14: Lift the scanner to remove the foam rubber element

Turn the foam rubber element up to an angle of approximately 45°, then pull it out of the back side of the scanner.



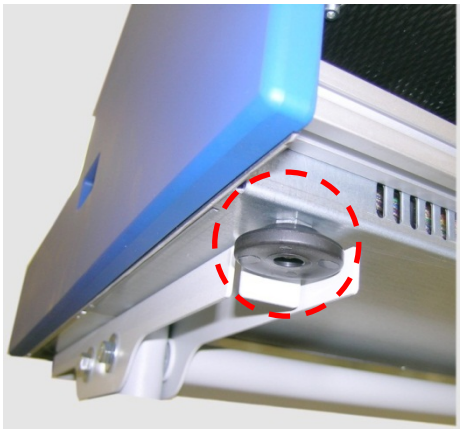
Picture 15:Removing foam rubber element and cardboard element

Repeat this at the other side of the scanner. Finally remove the small cardboard elements (Picture 15, detail 1) at the left and right side between scanner cover and side elements.

The WideTEK 36 scanner has four pre-mounted rubber feet on its bottom side. The position of the rubber feet corresponds to the cut-outs at the top of the longitudinal girders.

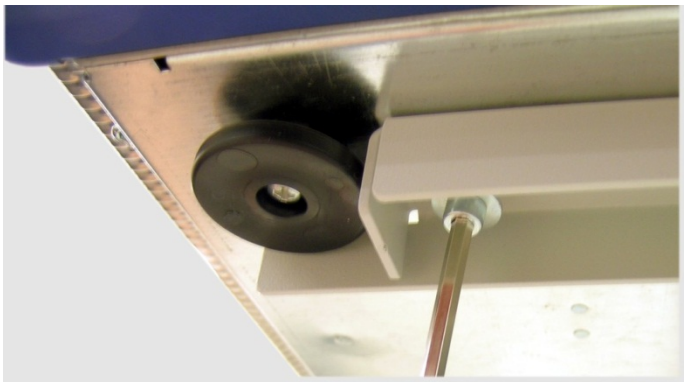
Place the WideTEK 36 on the floor stand so that the rubber feet are inserted into the cut-outs.

Picture 16: Bottom side, front side left



Picture 17: Bottom side, back side left

Finally, fasten the WideTEK 36 onto the floor stand. The four screws DIN 912 M5x10 with washers are used to fix the scanner.



Picture 18: Fastening the scanner onto the floor stand

The floor stand has boreholes on each side directly beside the cut-outs for the rubber feet. Insert the screws and fasten them securely.

Use the Allen wrench to fasten the screws.

After fastening the scanner on the floor stand, insert the paper exit basket. It is recommended to insert the paper exit basket from the back of the scanner. Place it on the rod and fix it with the hooks on the rear side of the WideTEK 36.

Picture 19: WideTEK 36 placed on floor stand, ready to use

A.4 Connecting to the Power Source

Before connecting the WideTEK 36 scanner to the wall outlet check the following items:

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

Inspect the power cable and ensure that it is undamaged.

Use only the power cable delivered with the scanner.

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

Turn the device off before plugging or unplugging any cable.

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

A.4.1 Connectors at the Scanner

The connectors are positioned at the left side of the housing, seen from the operators view (i.e. from the front of the scanner).

Picture 20: Connectors at WideTEK 36

1: Power connector

2: Foot pedal connector

3: Network cable connector

4: Main power switch

A.5 Powering up the WideTEK 36

The main power switch is found beside the power connector.

Picture 20 shows the position of power connector and main power switch.

After connecting the scanner to the electrical outlet, 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 36 in work conditions, it should **only be switched on and off by the touch panel**!

A.6 WideTEK 36 Touch Panel

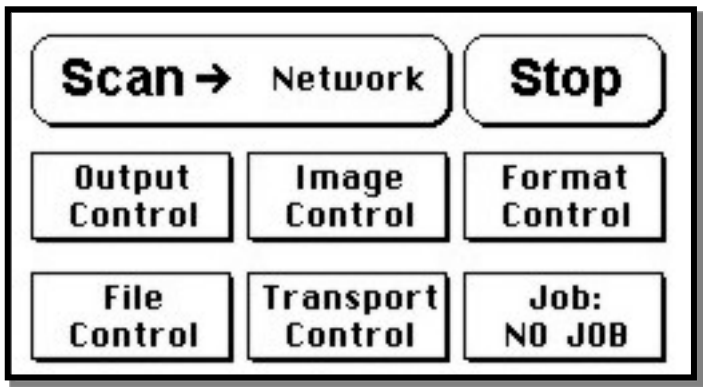
The WideTEK 36 parameters can be set and modified with the integrated touch panel. It shows an easy-to-use menu and helps the user to control all scanner parameters with the touch of a finger.

When the WideTEK 36 is powered up by 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.6.1 Starting the WideTEK 36 from Stand-By Mode

When the WideTEK 36 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 21: Start menu screen

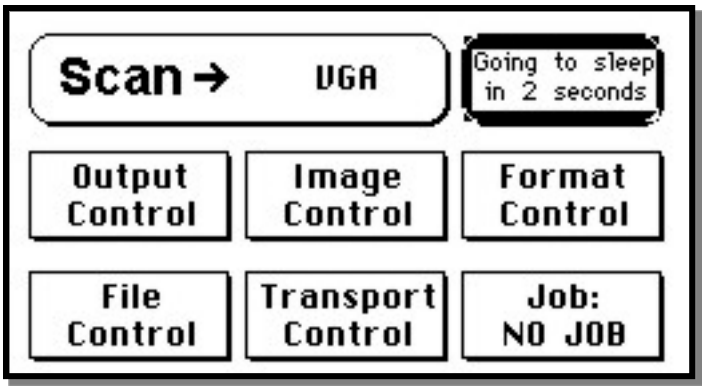
A.6.2 Turning-off the WideTEK 36

Note: **Always** turn off the WideTEK 36 scanner with the **Stop** button on the touch panel!

The main power switch should only be used when the WideTEK 36 is in stand-by mode and **before** the scanner is disconnected from the electrical outlet.

To turn the WideTEK 36 off, 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 36 is powered down. ➔ "Going to sleep in x seconds"



Picture 22: Touch panel while shut down in progress

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

A.6.3 The Help Function

To support the user when working with the WideTEK 36, a help function is integrated into the touch panel menus. A **Question Mark** (?) symbol in the lower right corner of the screen activates the help function.

After touching the question mark, all controls in the screen start blinking. To get the corresponding help text, the appropriate control must be touched. To return to the respective screen, the screen must be touched again on any arbitrary place.

A.7 Navigating through the Screens

Some of the screens show on the bottom line the buttons < Back > More Default

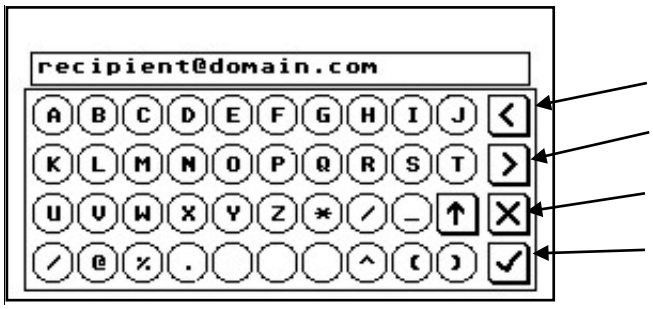
< Back — Returns to the former screen. Sometimes only the symbol **<** is displayed.

> More — Switches to the next logical screen, e.g. from **Format Control 1** to **Format Control 2**. Sometimes only the symbol **>** is displayed.

Default — Resets all values in the respective screen to default value.

A.7.1 How to Enter or Change Values

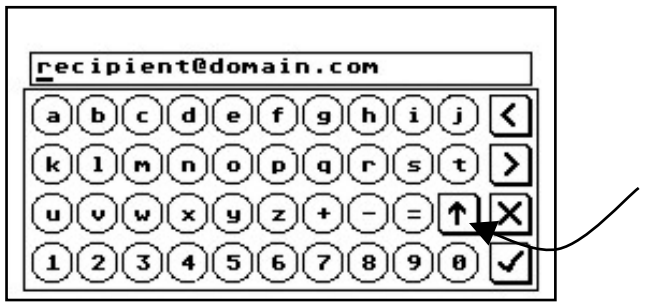
To enter new values or change existing values, the corresponding field or line in the screen must be touched. If a parameter requires an alphanumeric value, the touch panel display changes and shows a keyboard with which text and numeric values can be entered.



Picture 23: Keyboard with capital letters

The keyboard enables the user to enter capital letters, lower case letters, special characters as well as numbers.

The content of the keys is switched with this key:



Picture 24: Keyboard with lower case letters

A.8 IP Address Setup

Controlling of the WideTEK 36 scanner is based on the Scan2Net technology.

That means, access onto the scanner and the integrated Scan2Net user interface occurs by using a network connection. For this connection, every browser software can be used.

IP address at delivery: **192.168.1.50**

This IP address is also active after a “Reset to Factory Defaults”.

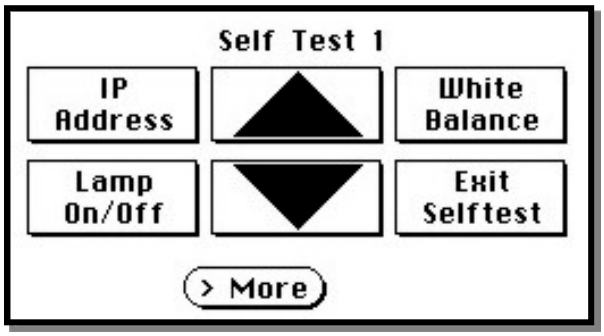
To integrate the scanner into an existing network structure all network parameters can be defined and/or modified by using the touch panel as well as the integrated Scan2Net user interface.

The following chapter describes how to setup the network parameters of the scanner by using the touch panel. The setup of the network parameters in the Scan2Net user interface is described in chapter B.3.1

A.8.1 IP Address Setup by Touch Panel

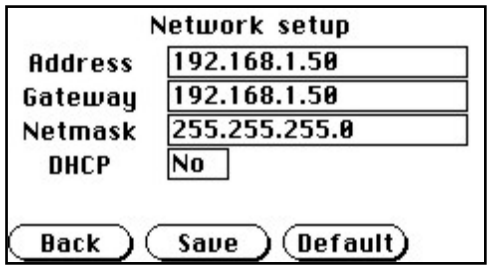
Start the WideTEK 36 from stand-by mode by tapping on the touch panel.

While the start sequence is running tapping on the touch panel **at least three times** switches the scanner to setup mode. After the start sequence is finished, the touch panel shows the **Self Test 1** screen.



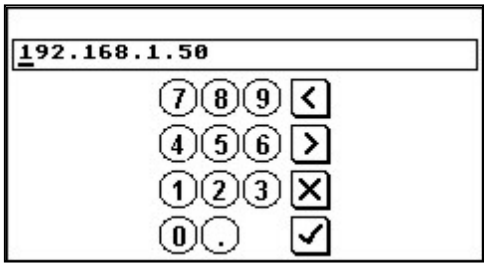
Picture 25: Self Test 1 menu

Touch the control field **IP Address**. The touch panel changes to a mask where IP Address, Gateway, and Netmask can be entered. Also the DHCP mode can be selected.



Picture 26: Network setup

Touch on the line to be changed, e.g. the **Address** line. The touch panel shows:

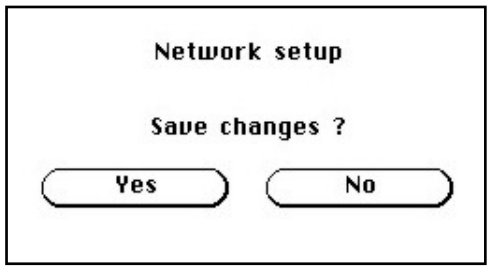


Picture 27: Numeric key pad

Enter the new values. The **<** and **>** keys move the cursor, the **X** key deletes the number at the cursor position.

To finalize the input tap on the checkmark key.

If entries have been changed, a screen opens where the changes must be confirmed. **Yes** confirms the changes, **No** discards the changes.



Picture 28: Confirm changes

After the changes have been saved, the touch panel shows the **Self test 1** menu again.

A.9 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.9.1 White Balance

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

To ensure optimal performance, the WideTEK 36 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.9.1.1 Helpful information about the white balance adjustment

The WideTEK 36 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.

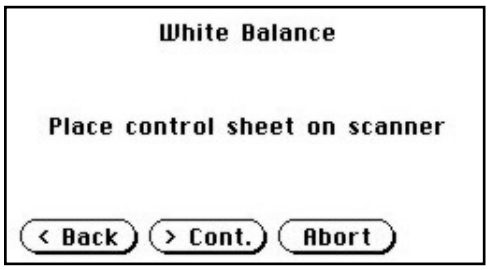
Periodically performing the white balance adjustment is recommended to ensure consistent best scan results.

A.9.1.2 Performing the White Balance Adjustment

Start the scanner as described in chapter A.6.1. 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 25).

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



< Back Returns to the former screen.

> Cont. Starts the measurement.

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

Picture 29: White Balance screen

Place the white balance test target WT36-Z-02-A in the document input. The test target covers the complete width.

Now tap on **> Cont.**

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

Picture 30: 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 31: White balance result

B Software Setup

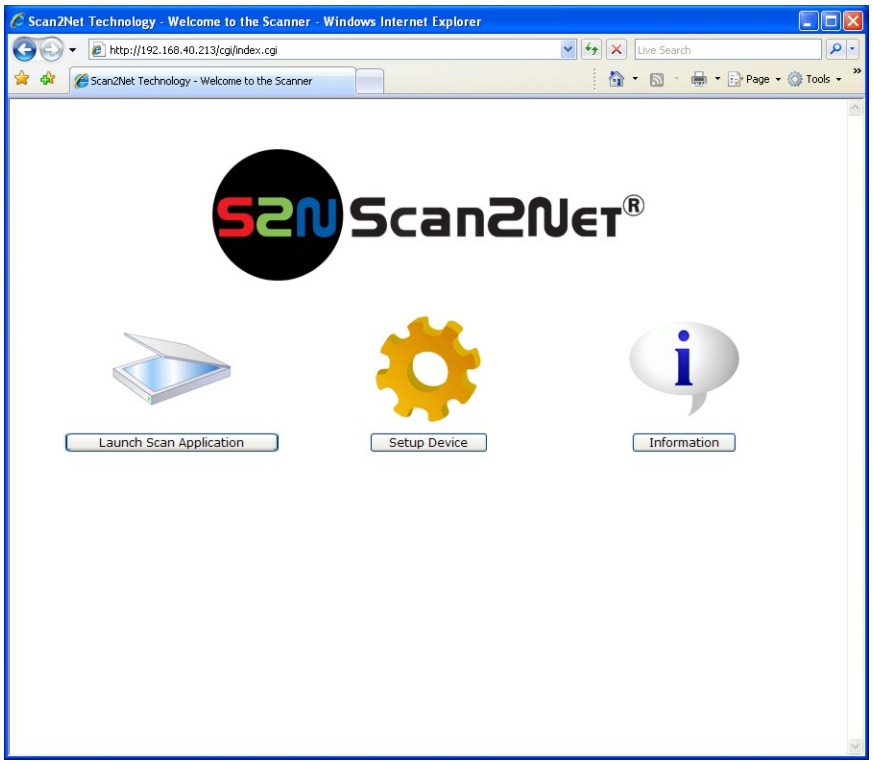
Essentially, the scanner is a web server and comes with its own HTML-based user interface. To access a Scan2Net scanner, any standard web browser can be utilized.

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 32: 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.

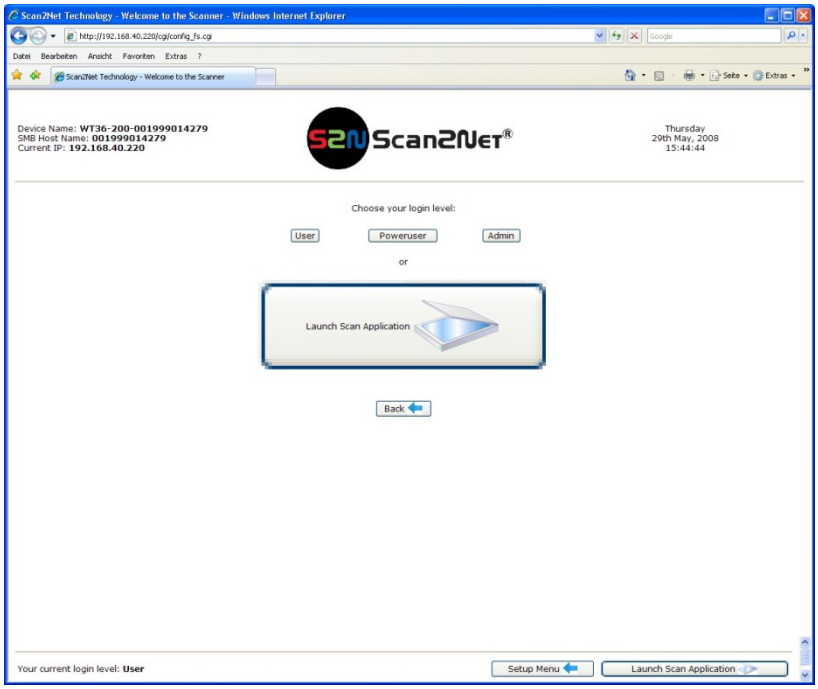
Setup Device changes to the setup menu. Starting with the following chapter, the basics of the scanner configuration will be described.

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 33: Login level screen

B.2.1 Selecting the Login Level

User This level allows the user to get some status information of the WideTEK 36 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.

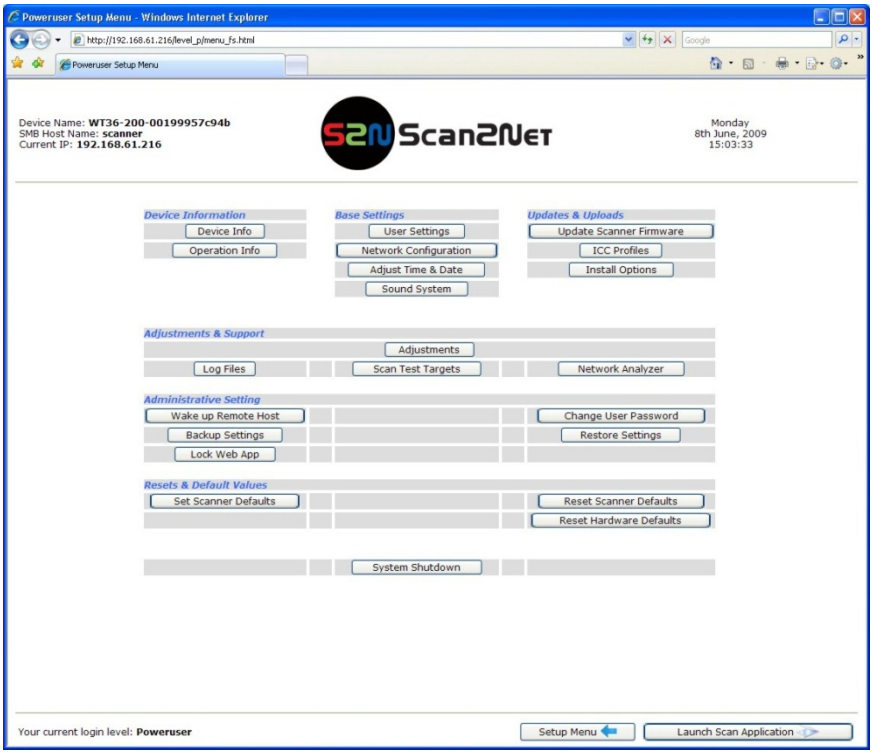
Access to the **Admin** level is limited for trained technicians.

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 34: Poweruser main menu

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

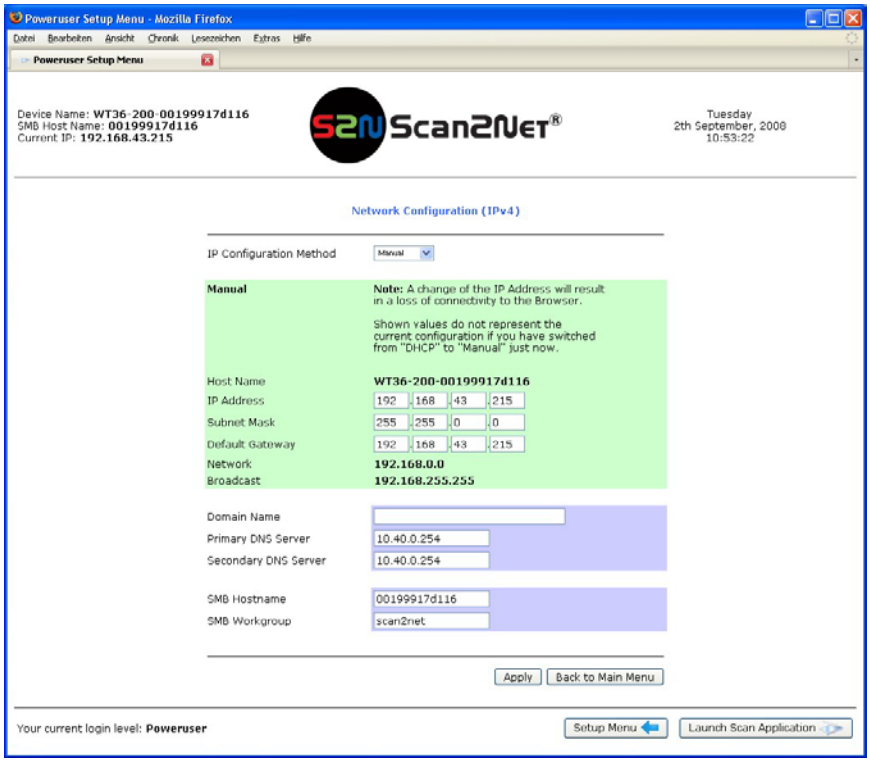
The main menu screen for the **Poweruser** level opens. The main menu is separated in several sections.

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

Note: For a detailed description of the User Settings see the Operation Manual, chapter **Setup Menu**.

B.3.1 Setup Network IP Address

In the **Poweruser** main menu find the section **Base Settings** and click on the Network Configuration button.



Picture 35: 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.

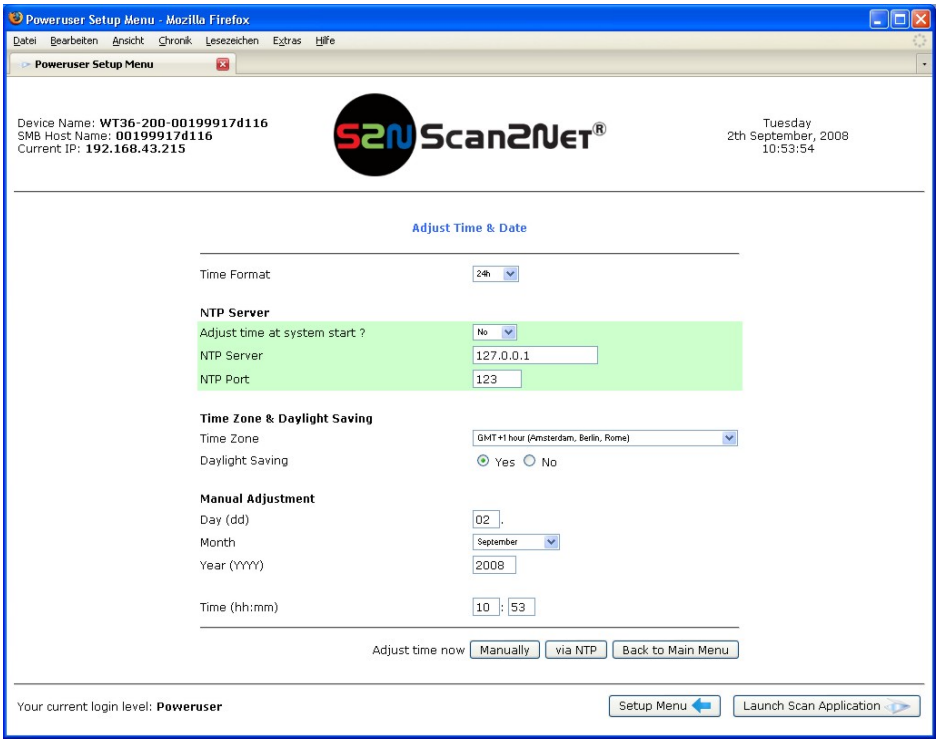
When the IP address has been changed, click on the Apply button. The new values will be transferred and the scanner is accessible with its new IP address.

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

Now enter the new IP address and open the login level **Poweruser** as described above (chapter B.2 / B.3)

B.3.2 Adjust Time & Date

In the **Poweruser** main menu screen (Picture 34) locate the section **Base Settings**. Click on the button Adjust Time & Date.



Picture 36: 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.

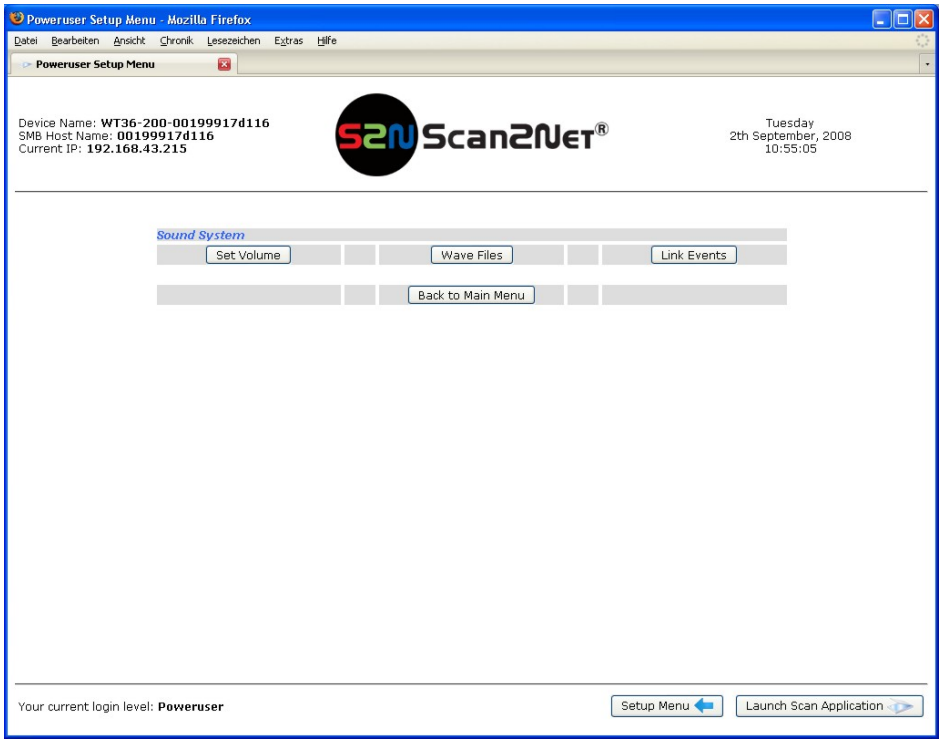
Click the button Manually to refresh all above modified data.

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.



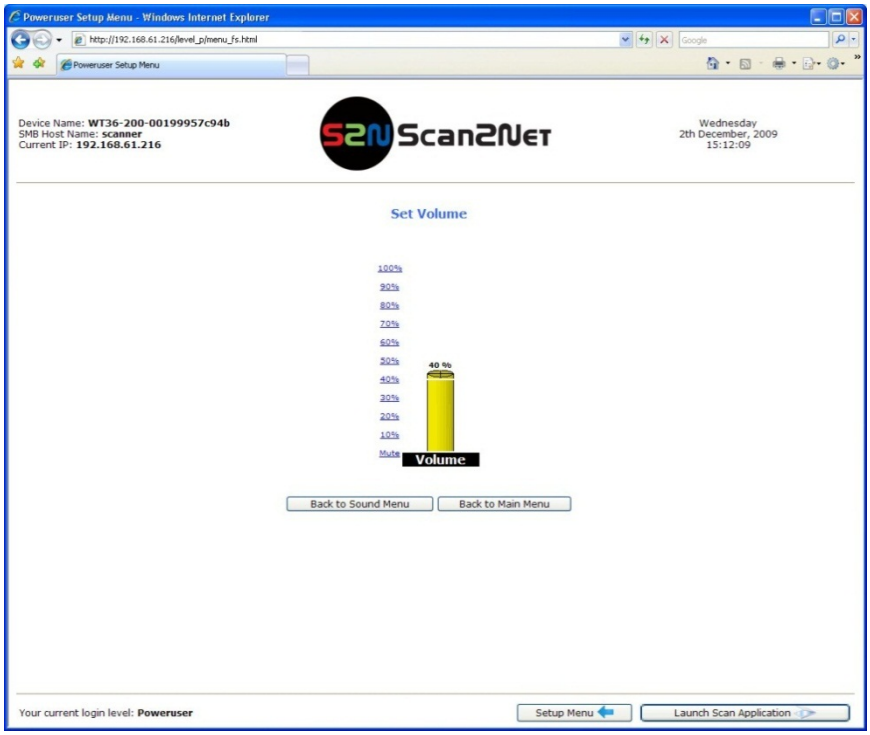
Picture 37: Sound System screen

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 .

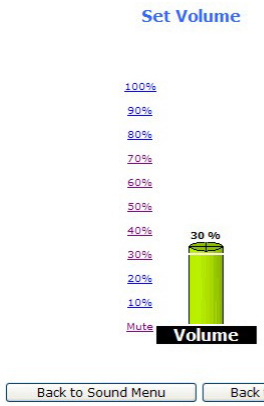


Picture 38: Volume level displayed

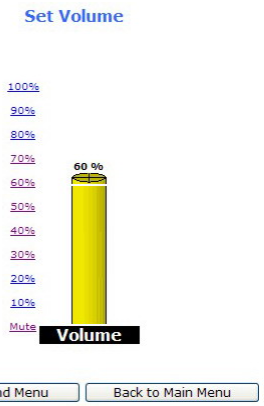
To set the volume level, click on the desired percentage value in the list left beside the graphic symbol.

The symbol color changes depending on the selected value.

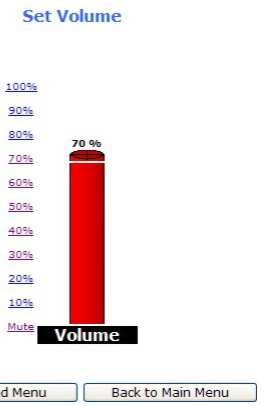
Up to 30%



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 34).

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 39: List of sound files

The list of the installed sound files will be displayed.

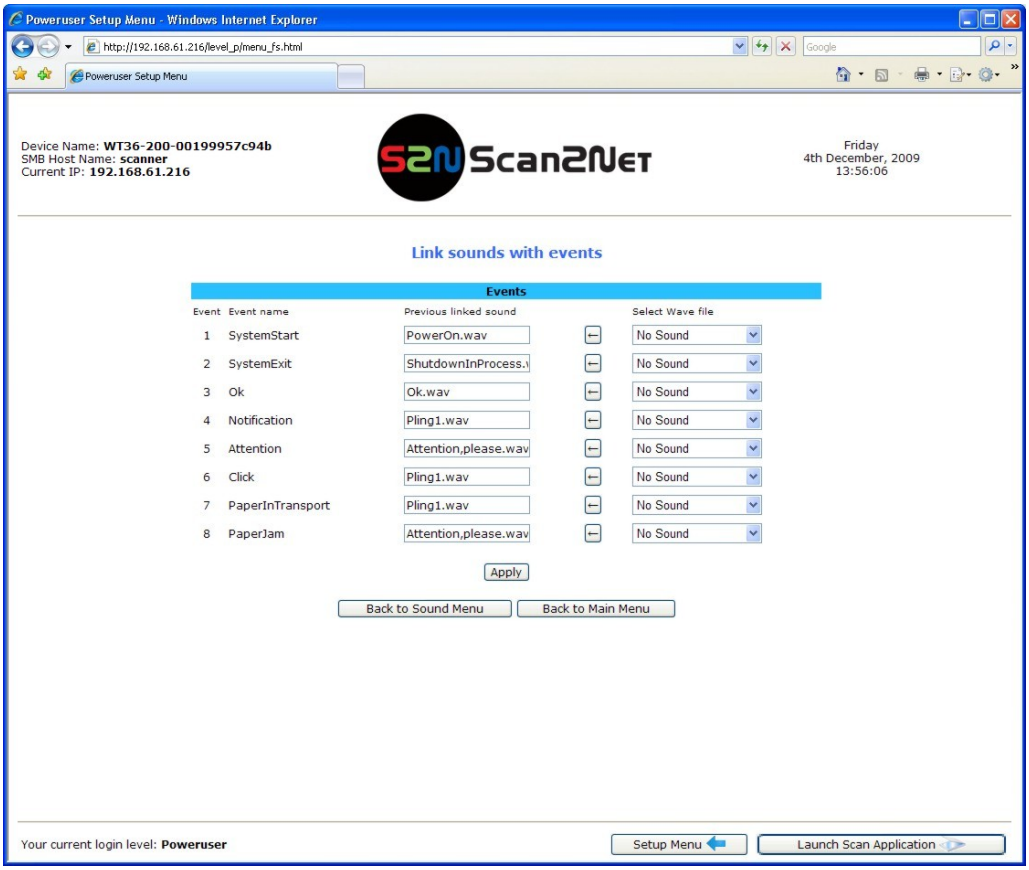
Click on the button Search to search for the desired WAV sound files.

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 40: 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 34).

B.3.4 Firmware Update

The Image Access Customer Service Portal (CSP) at http://service.imageaccess.de offers downloads of firmware updates for every Scan2Net scanner. As a registered user, log in to the CSP 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 ZIP archive of the current firmware version to your local PC.

The ZIP archive contents:

- Three “txt” files with information concerning the installation, the release notes and the version number.
- One “tar” archive with the firmware

Important: **Never unpack the “tar” archive file!**

Always send **the complete ZIP archive** to the scanner!

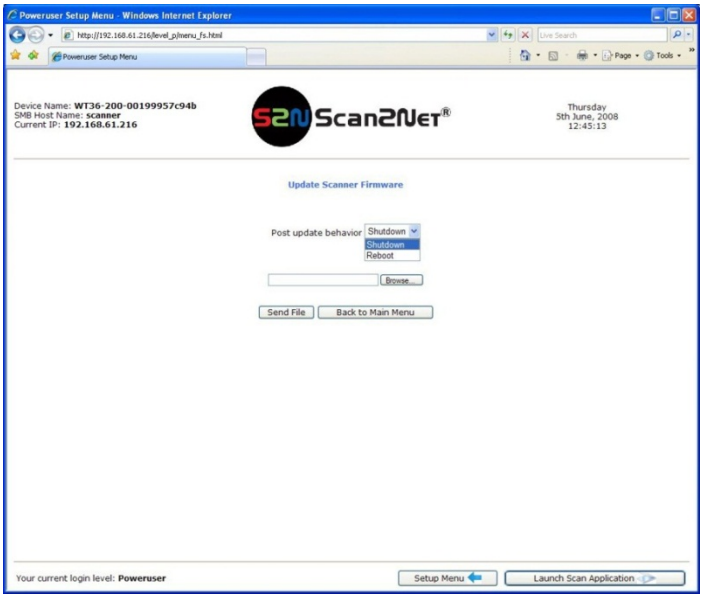
Start the scanner. Select Setup Device and go to the login level Poweruser .

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

Select the “Post update behavior” of the scanner from the list.

Post Update Behavior: Select between **Shutdown** and **Reboot**.

Selecting **Reboot** is recommended if the scanner is not directly reachable.



Picture 41: Firmware Update

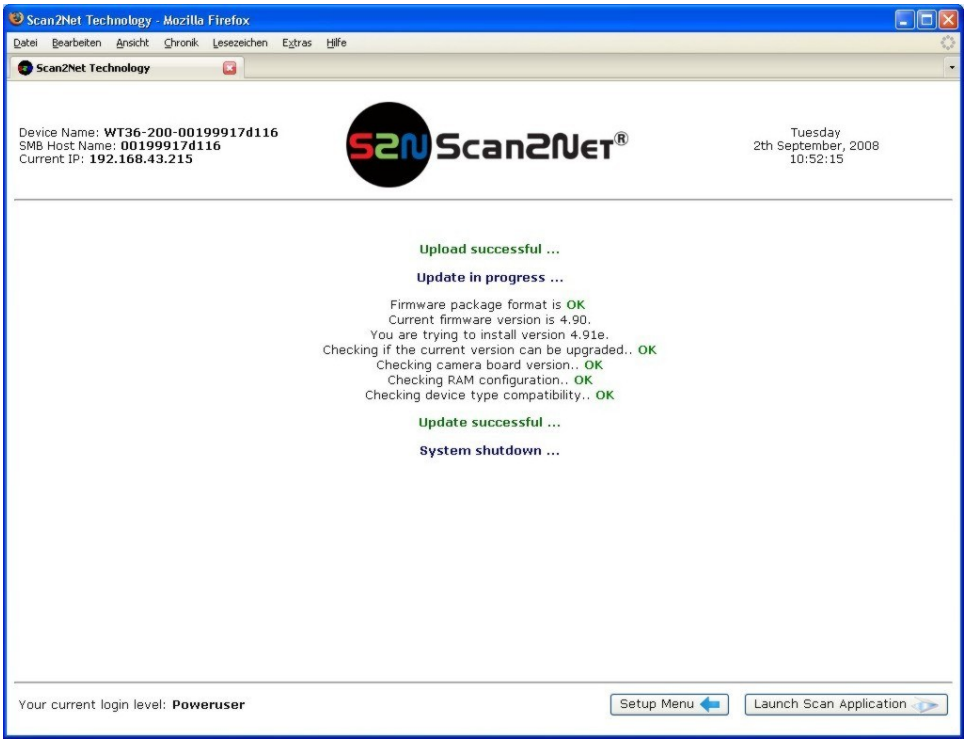
Browse your local PC and select the previously downloaded firmware update file.

Click the button Send File to transfer the selected firmware file to the scanner.

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

Transferring the firmware file can take a couple of minutes, depending on the network performance. 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 42: Summary of successful firmware update

To finalize the update process the scanner must be re-started. This is done automatically if **Post Update Behavior** is set to **Reboot**.

It **Shutdown** is selected, the scanner powers down at the end of the firmware update.

When restarting after a firmware update the scanner reboots with factory default settings.

Note: A White Balance adjustment must always be executed after a firmware update.

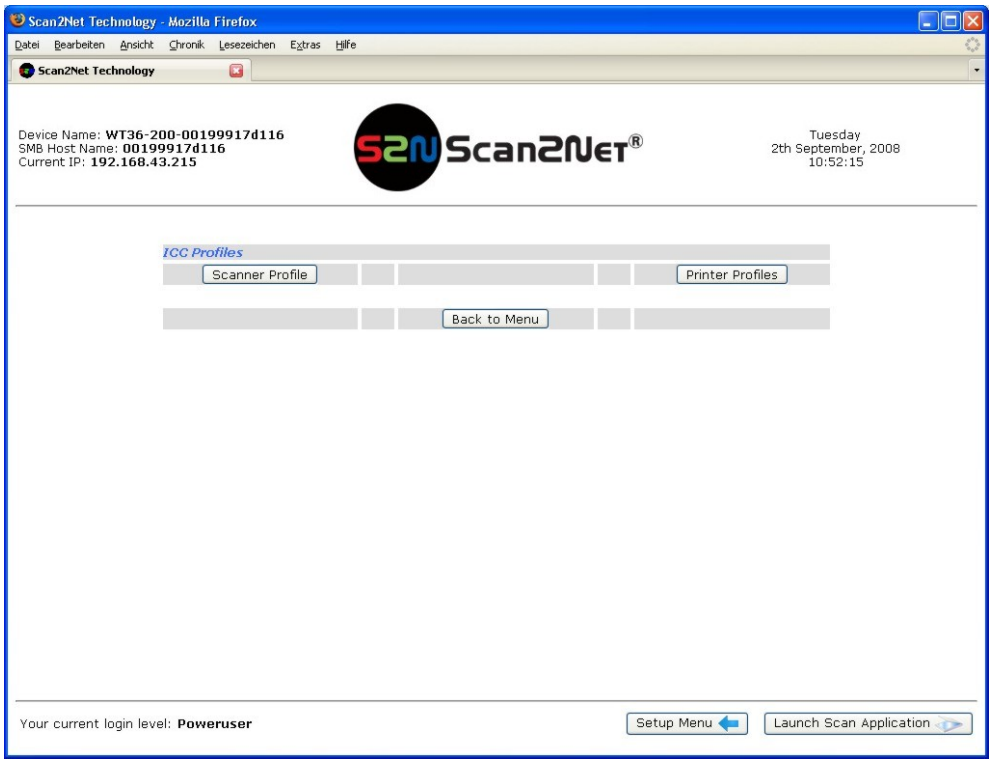
See chapter B.3.7 for more information about the White Balance adjustment.

All installed options will stay active.

B.3.5 Install ICC Profiles

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

Select either Scanner Profile or Printer Profile.

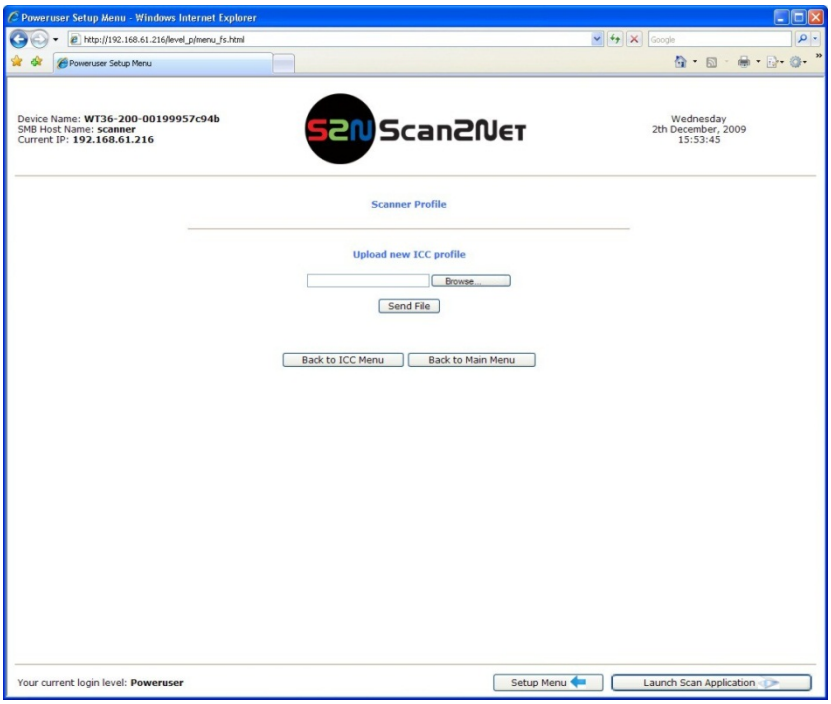


Picture 43: ICC Profile screen

ICC profiles will be integrated in the image file data. ICC profiles adapt the color space between scanner and image editing software or between scanner and printer.

By using an ICC profile a color-true reproduction of the scanned documents can be provided.

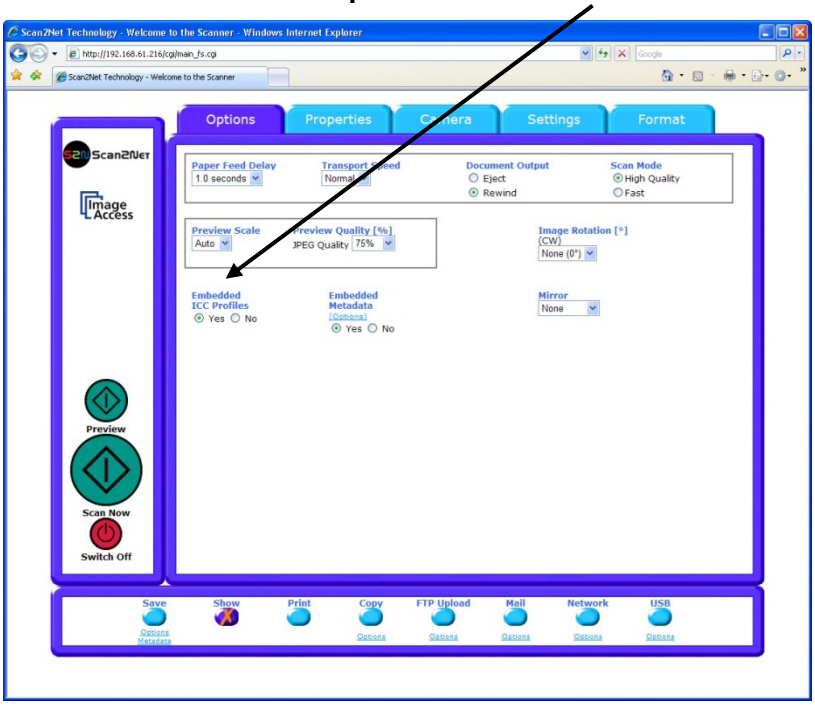
Browse for a new ICC profile and select it. If another ICC profile is already installed, it will be displayed. Selecting another profile will replace the previous file.



Picture 44: Upload ICC Profile screen

Click on Browse to select the desired ICC profile.

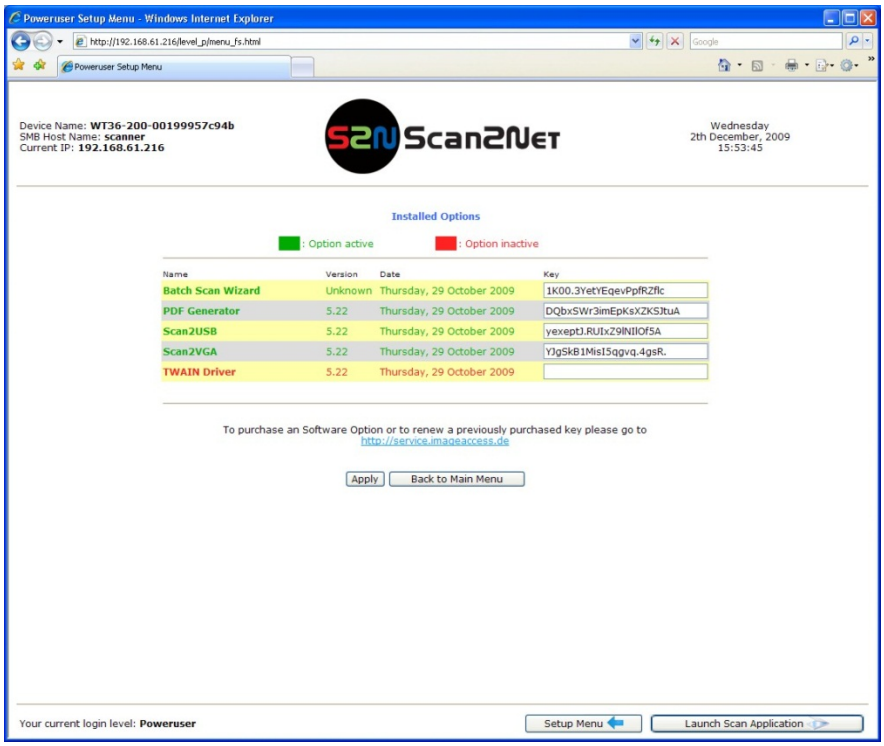
Click on Send file to upload the selected profile. To activate the ICC profile click in the Scan2Net user interface in the section **Options** on **Embedded ICC Profiles**.



Picture 45: Embed 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 46: Install Option screen

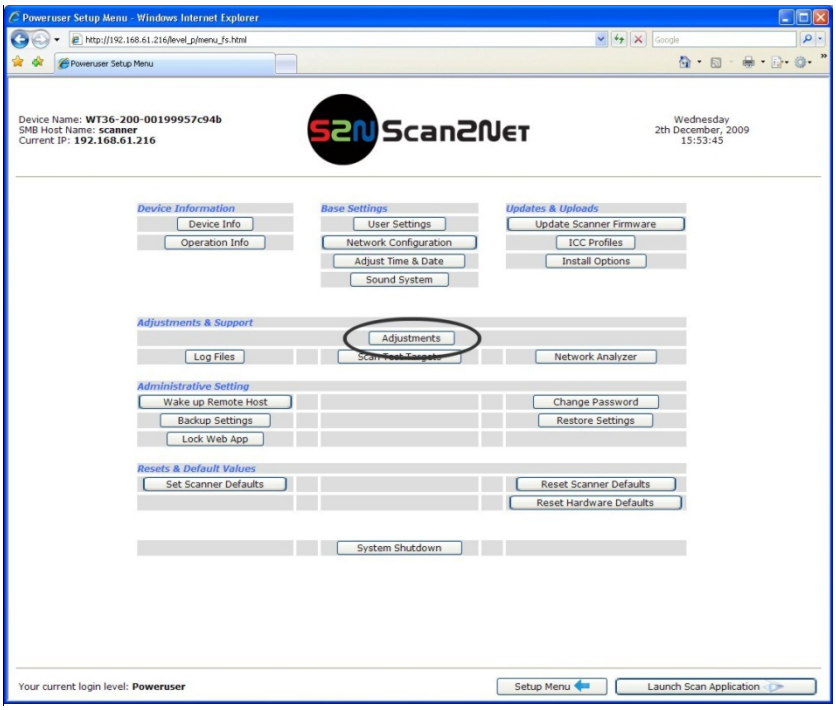
Note: Option keys are valid only for one option on a specific scanner denoted by its serial number.

If a key is accidentally deleted it can always be obtained again at the Image Access Customer Service portal http://service.imageaccess.de at no extra cost.

B.3.7 White Balance

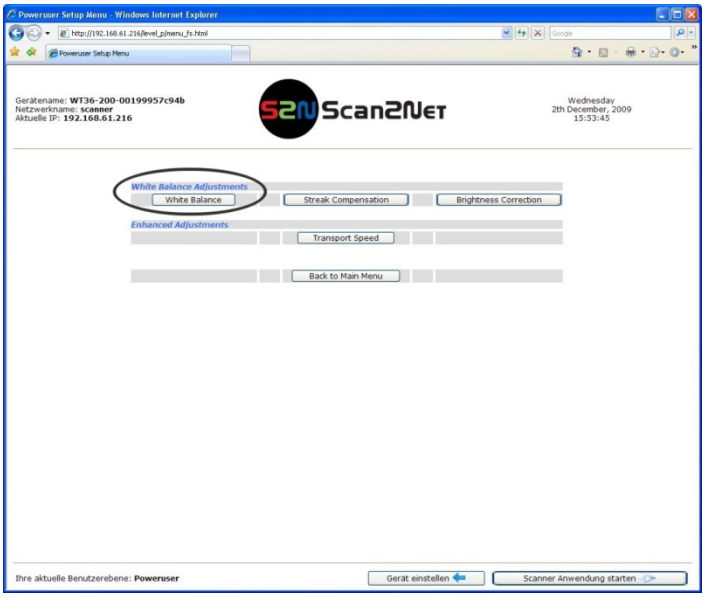
In the Poweruser main menu screen, locate the section **Adjustments & Support**.

Click the button Adjustments.



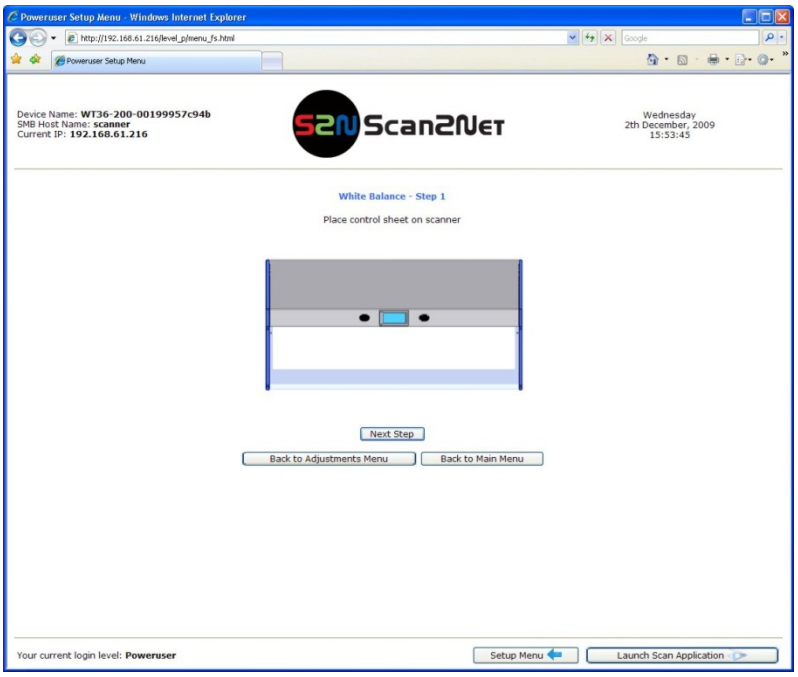
Picture 47: Click the marked button

In the next screen, locate the section **White Balance Adjustments**. In this section click on the button White Balance.



Picture 48: Select „White Balance“

The next screen shows how to place the White Reference Target WT36-Z-02-A on the document table.



Picture 49: White Reference Target on document table

Click on Next Step to start the White Balance Adjustment sequence.

After the White Balance Adjustment has finished, the results will be displayed in a status screen.

Positive status will be displayed in green color.

Error message will be displayed in red color, followed by some explanatory remarks.

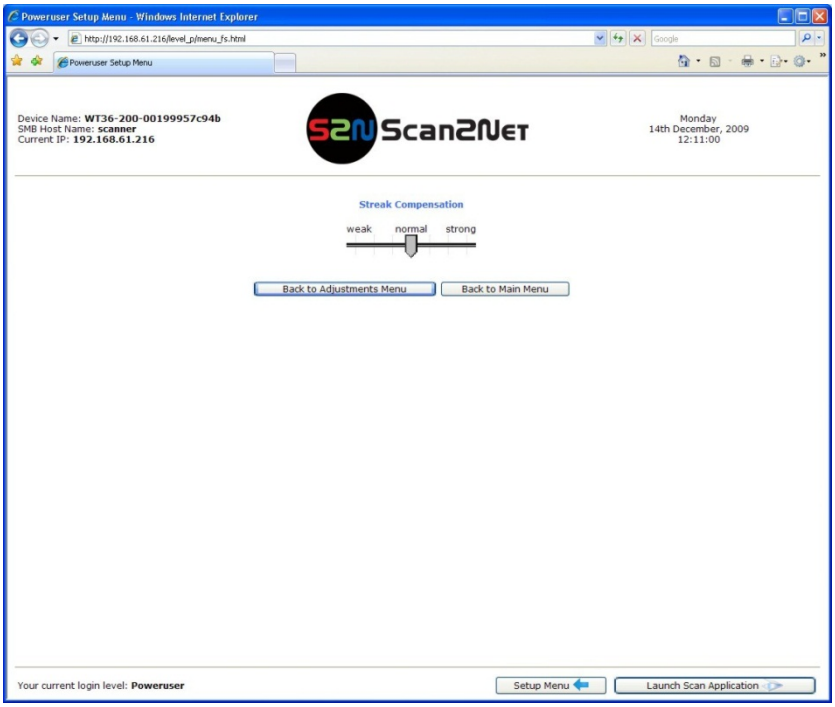
Note: It is recommended to execute the White Balance Adjustment after every firmware update and after every cleaning, maintenance and repair of the scanner.

B.3.8 Streak Compensation

In the Poweruser main menu screen, locate the section **Adjustments & Support**.

Click the button Adjustments.

In the next screen, locate the section **White Balance Adjustments**. In this section click on the button Streak Compensation.



Picture 50: Streak compensation

The slider allows defining the streak compensation.

Streak compensation means, when executing a white balance sequence, small streaks in the picture area of the camera will be compensated.

Note: The scanner has to be on operating temperature before modifying this setting. The effect of the streak compensation has a slight dependency on temperature.

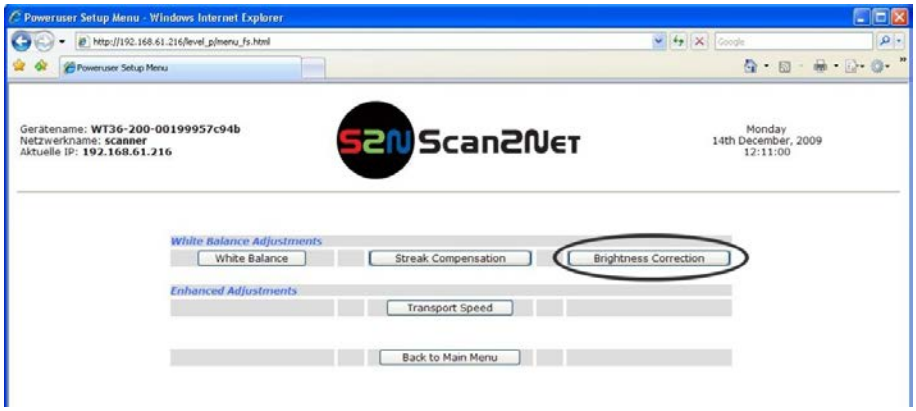
After modifying the position of the slider a white balance must be executed.

If the slider is set to position **Stronger**, the white balance eliminates smaller streaks in a wide range.

B.3.9 Brightness Correction

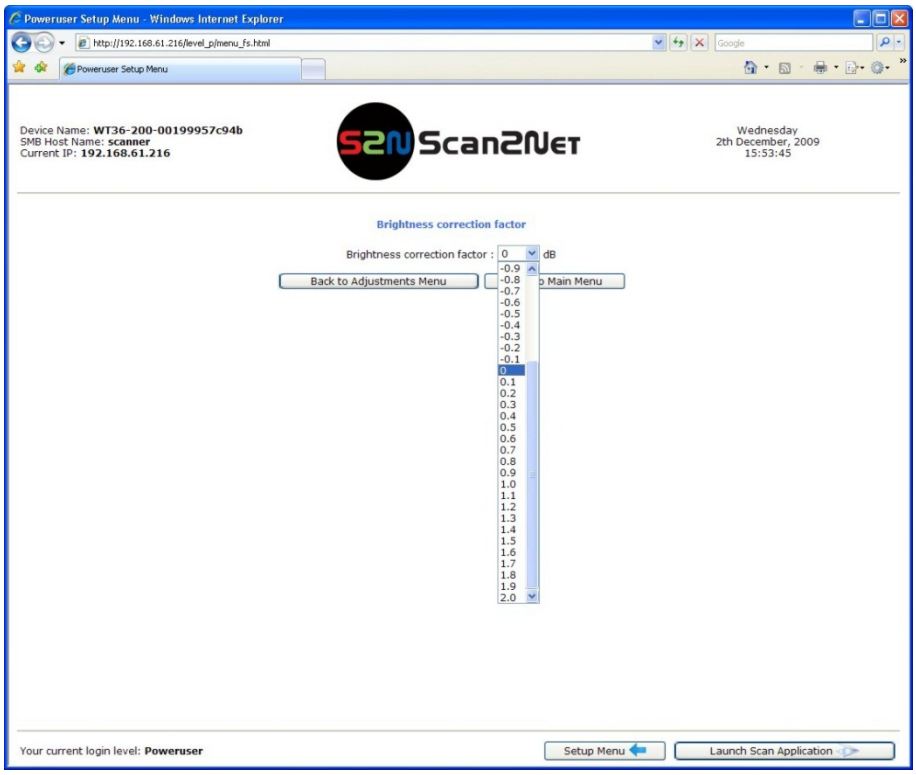
This function enables the user to change the gains settings up to +/- 2 dB, while positive values make the scan look brighter.

To set the Brightness Correction, click the button Brightness Correction in the section **White Balance Adjustments**.



Picture 51: Selecting "Brightness Correction"

This will open a screen in which the desired value can be selected from a list.



Picture 52: Selecting the correction factor

C Cleaning, Test and Troubleshooting

Although the WideTEK 36 scanner is constructed with the focus on a minimum of cleaning requirement, it is needful to clean some parts after a period of using.

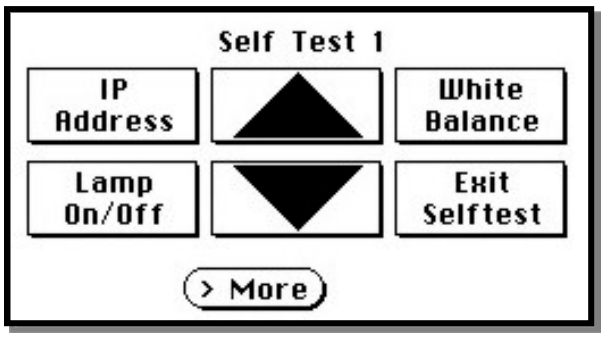
C.1 Cleaning the Transport Drums

When scanning documents the print color on the paper will soil the rubber material of the transport drums. This can result in some cases in stripes on the paper of the scanned document.

To avoid those stripes it is recommended to clean the transport drums in regular intervals. Cleaning the drums is done very easily.

When the WideTEK 36 is in stand-by mode, start it 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 the WideTEK 36 can be switched to Self Test mode. Tapping on the touch panel at least three times switches to the setup mode. After the start sequence is finished, the touch panel shows the Self Test 1 screen.

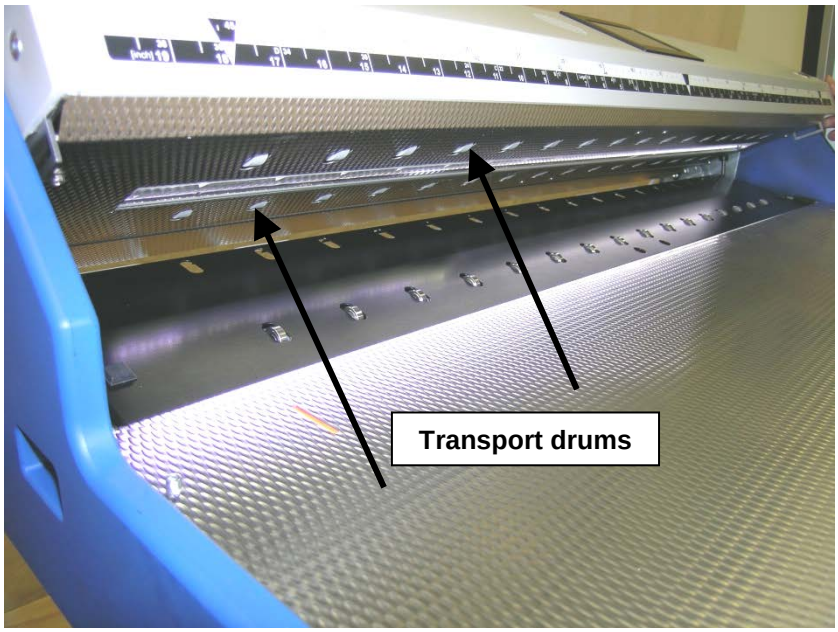


Picture 53: Self Test 1

The triangle arrows in the middle of the screen control the motor for the transport drum.

To clean the transport drums use a microfiber cleaning cloth and some drops of a cleaning fluid, e.g. isopropyl alcohol.

Open the upper unit by clicking the locking lashes at the left and right side of the housing. Both transport drum are now visible.



Picture 54: Transport drums at front and back

Press and hold one of the triangle arrows on the display to start rotating the transport drums.

Press the microfiber cloth at the transport drums.

Repeat this for each element of the transport drums.

Use a dry and fluff-free cloth to wipe off any remaining cleaning fluid from the transport drums.

C.2 Cleaning the Glass Plate

To clean the glass plate open the upper unit by clicking the locking lashes at the left and right side of the housing.

Use the microfiber cloth which is delivered with the scanner or a fluff-free cloth to clean the glass plate.

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

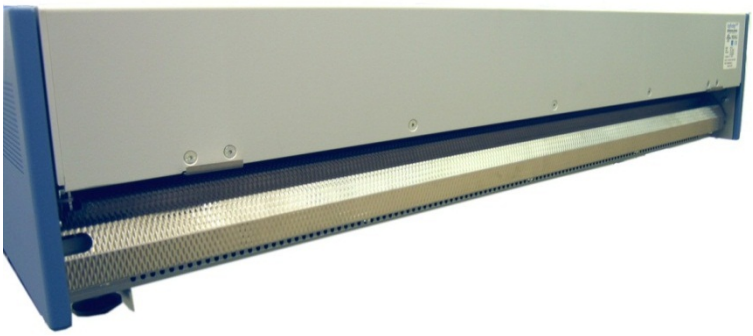
C.3 Replacing the Glass Plate

If the glass plate is scratched it can be replaced as one part including the glass plate rack.

The following tools are needed:

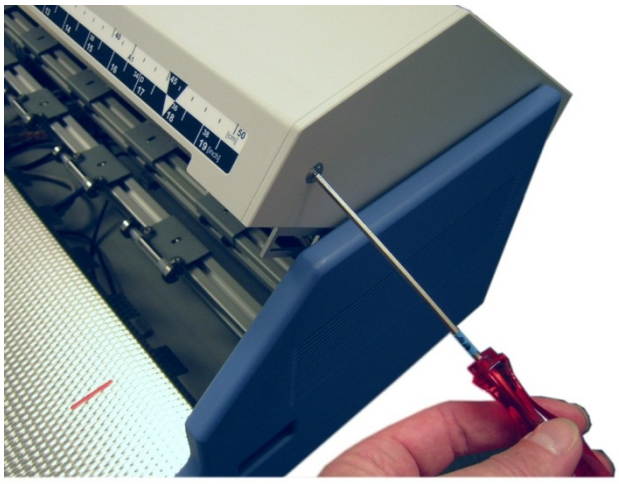
- Hexagon ball shaped head screwdriver, size 2,5 mm and 3 mm
- Allen wrench, size 2,5 mm

At first the main cover has to be removed. The main cover has seven hexagon head screws at the back side



Picture 55: Hexagon screws at WT 36 backside

and one hexagon screw on the left and the right side of the housing respectively.

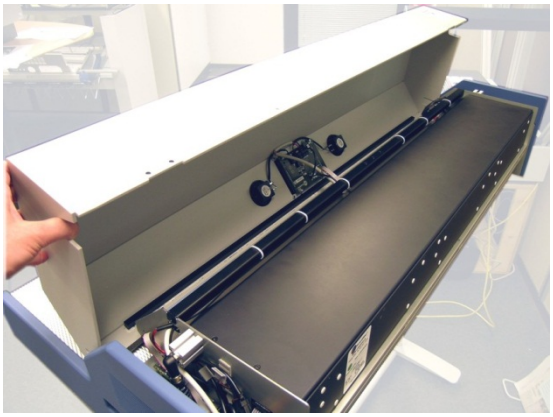


Picture 56: Hexagon head screw at left side of housing

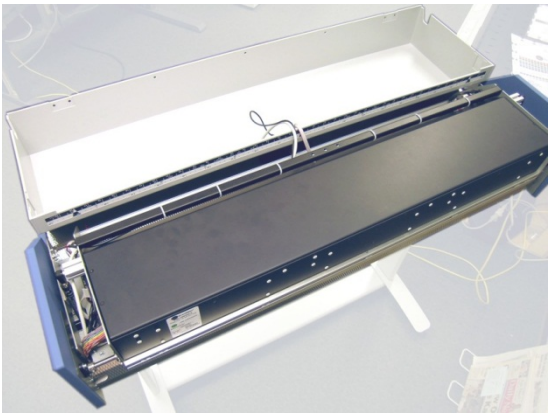
After removing the screws the main cover can be lifted.

Note: Lifting of the main cover must be done carefully because of the cable which connects the TFT display and the mainboard.

Picture 58 shows, how the main cover should be placed on the document table.

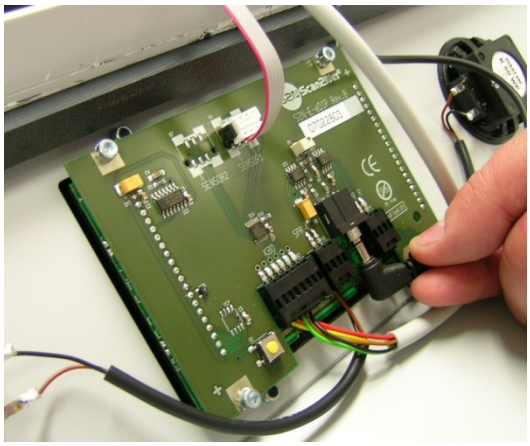


Picture 57: Lifting the main cover

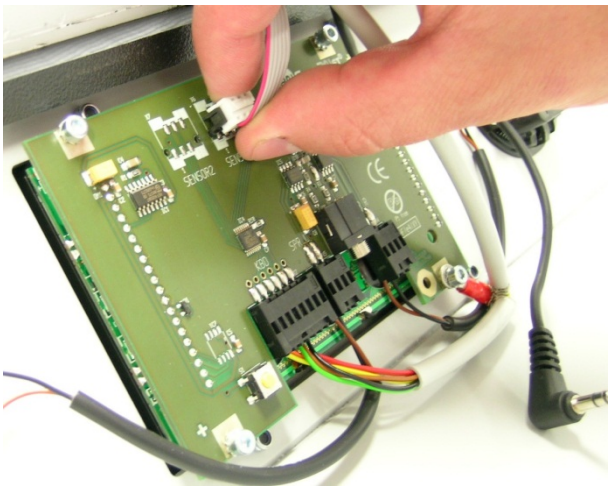


Picture 58: Placing the main cover

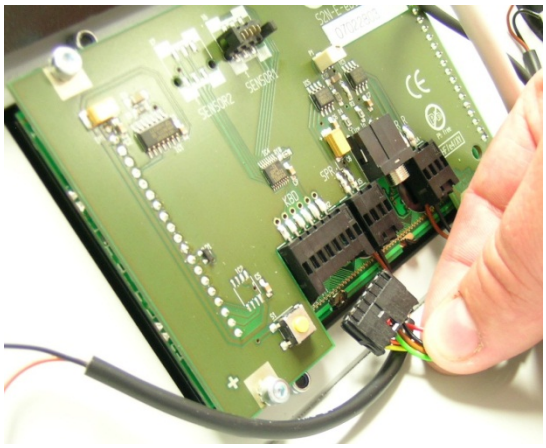
In the next step disconnect the cables from the connectors at the TFT display.



Picture 59: Audio connector



Picture 60: Sensor connector

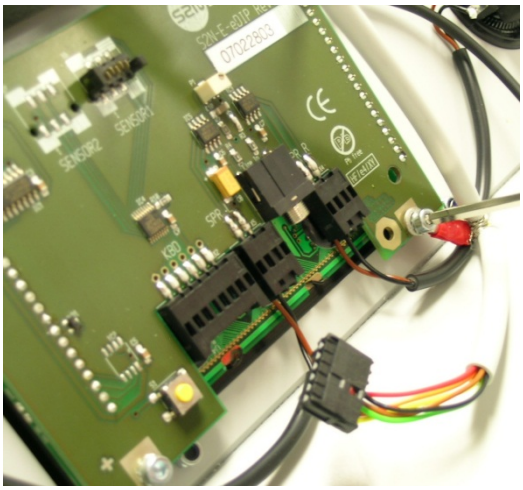


Picture 61: Controller connector

To open the last connector a hexagon ball shaped head screwdriver, size 2,5 mm, must be used.

Notice the order of the elements on the screw: Lock washer ➔ Cable connector ➔ lock washer.

This order must be the same when reconnecting the cables to the TFT display.



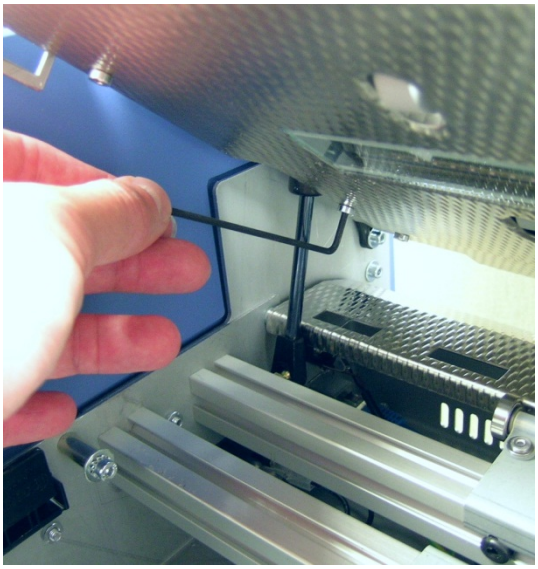
Picture 62: Cable connector

When all cables are disconnected, the main cover can be removed from the document table.

For the following step use an Allen wrench, size 2,5 mm.

The upper unit must be opened to reach the four screws which hold the glass plate rack.

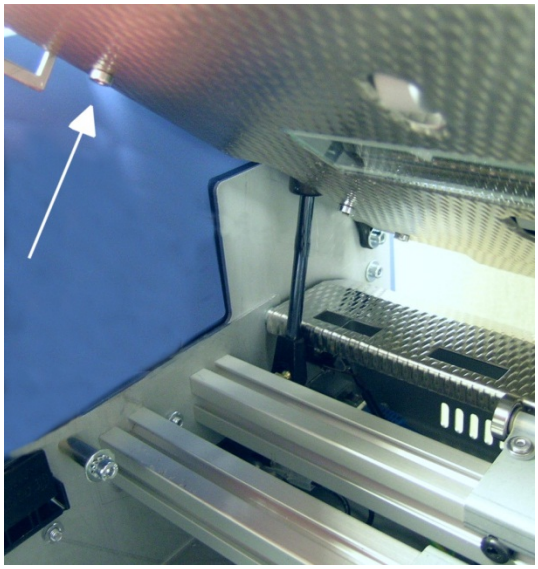
It is recommended to begin with the two screws at the back. The next two pictures show the position of the screws at the glass plate rack back.



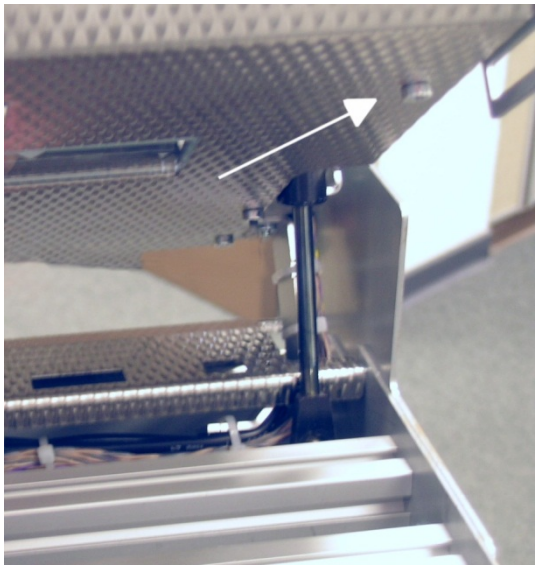
Picture 63: Screw at back, left side

Picture 64: Screw at back, right side

At next remove the screws on the front side of the glass plate rack.



Picture 65: Screw at front, left side

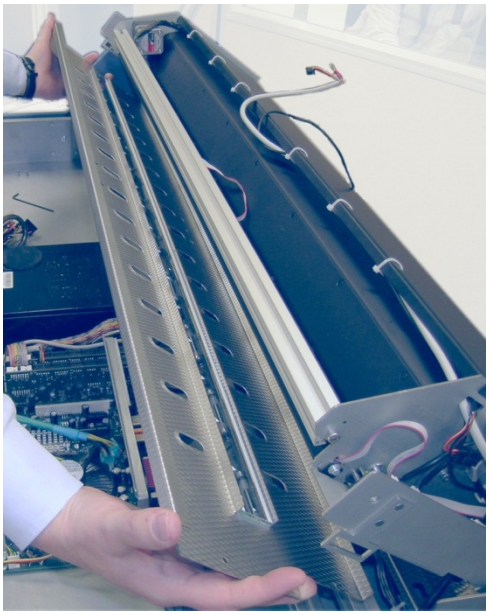


Picture 66: Screw at front, right side

After removing the front screws, the glass plate rack hangs in the upper crossbeam. Hold it at its external ends and lift it a little upwards.

Picture 67: Holding the glass plate rack

Then it can be removed in direction of the document table.



Picture 68: Removing the glass plate rack

The new glass plate rack will be mounted in reverse order. Ensure that all cables are properly connected to the TFT display. Fasten the screw on the TFT display which holds the cable connector only hand-screwed.

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.

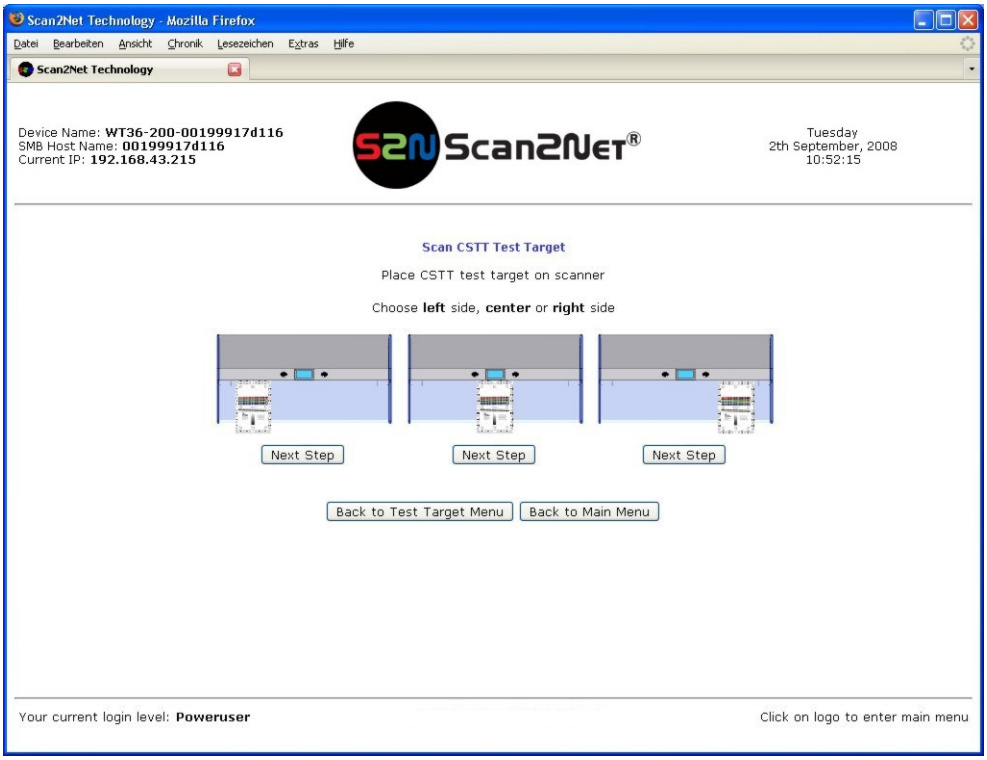
In the Poweruser main menu screen find the section ***Adjustments & Support***. Select here Scan Test Targets. Another screen opens.

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.

The CSTT test target can be placed at three position. Select a position corresponding to the picture on the screen. Click on Next Step to start the test sequence

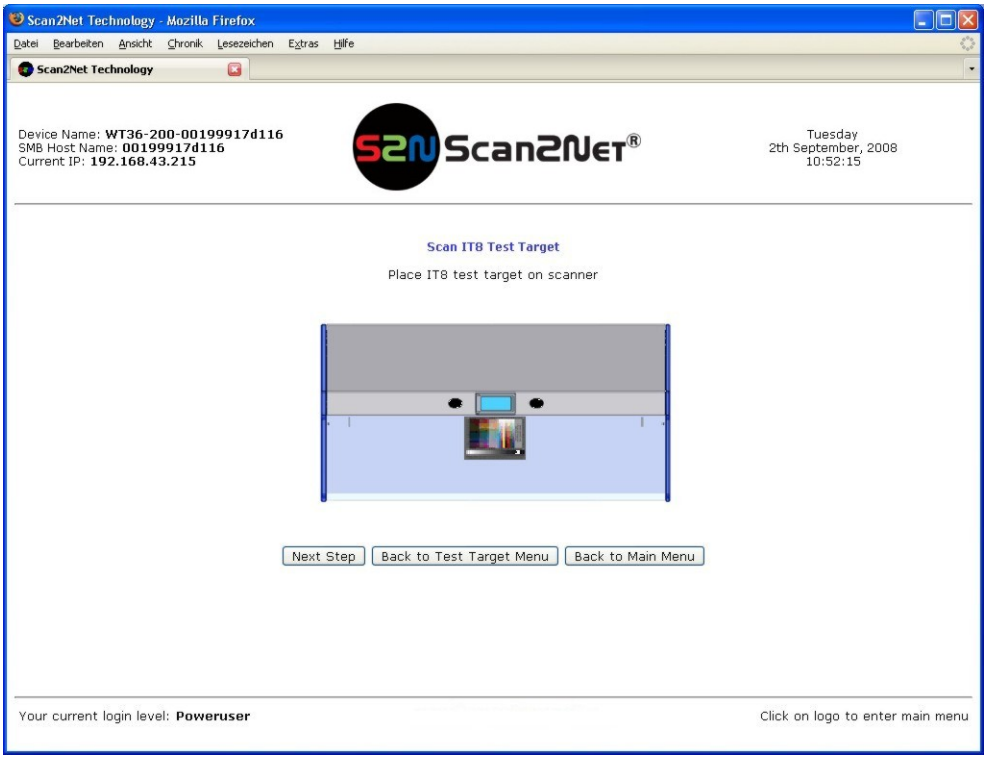


Picture 69: Position of CSTT target on the document table

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.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.



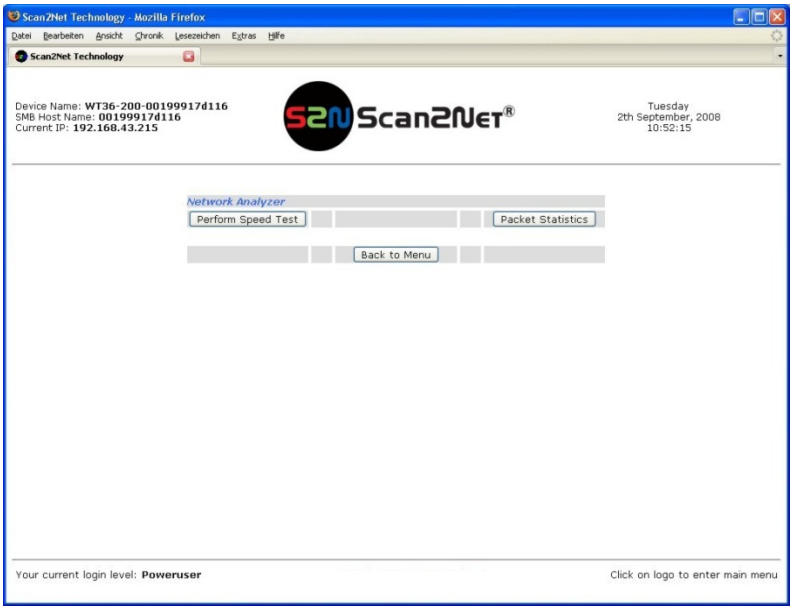
Picture 70: Position of IT8 test target on the document table

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.

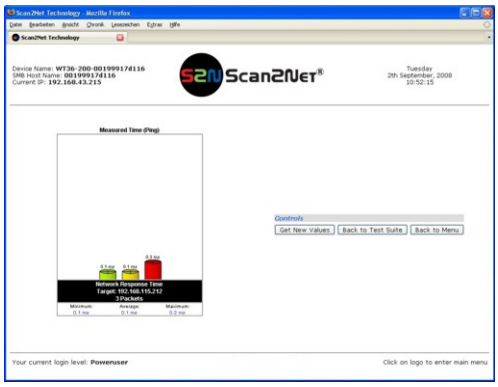
Locate the section ***Adjustments & Support*** in the Poweruser main menu screen and click the Network Analyzer button.



Picture 71: 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 72: IP address for testing



The test results will be displayed in a diagram.

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 73: 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.

2. Remove the metal compensator. This is down within a few steps easily.

   At first open the upper unit by clicking the locking lashes at the left and right side of the housing.

Then find a gap at the right side of the compensators plate

Picture 74: Position of gap on right side

and a gap at the left side of the compensators plate where you can pull the compensator plate upwards.

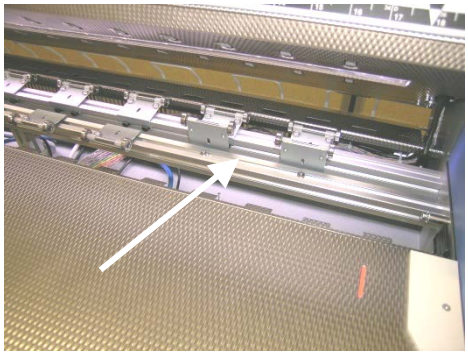
Picture 75: Position of gap on left side

Pull the compensator plate slowly backwards to the document table

Picture 76: Moving the compensator plate upwards

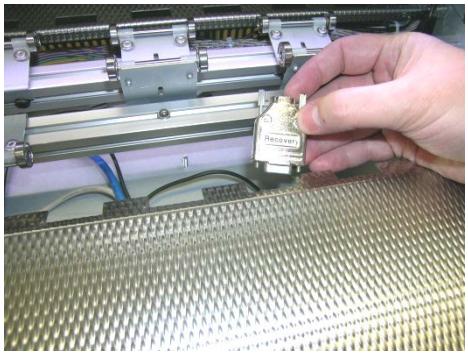
Picture 77: Compensator plate on document table

and place it on the document table.



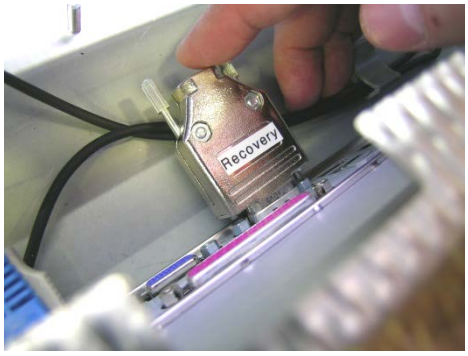
Picture 78: Compensators lifted

In the next step, lift up two of the compensators at the right side. Because of the elastic rubber elements in the compensator it could be necessary to fasten them temporarily.



Picture 79: Inserting recovery key

Now the recovery key can be inserted.



Picture 80: Connectors on rear panel

Plug the recovery key into the serial port 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. Set the compensator into its basic position and insert the compensator plate.

7. 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

8. 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.

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

10. 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 Error Codes

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

White background of the problem description indicates that the message is information only.

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

Note: Problem description text with a red background indicates a critical error.
The device will be stopped and further scanning is inhibited.

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	An attempt to access the scanner with an invalid password was made.
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.
6	E06 POWER SUPPLY FAILED	Power supply failed	A problem with the internal power supply was detected. Operation is not possible.
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.
15	Document feeding error.	Document feeding error.	The document is not inserted correctly. Please insert the document again. Using “Transport speed” = “slow” may help.
16	Paper over exit sensor	Paper over exit sensor.	Paper is found in the exit sensor region. Pull paper out of the device.
17	Paper in transport	Paper in transport Please clear transport	Paper is found in the transport. Clean transport first.
18	Paper jam	Paper jam Please clear transport.	Paper jam occurred. Clear transport first.

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		The application specified an invalid preview scale. Not all scale factors are allowed with all image sizes.	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	Error 55: Wrong S2N Board (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	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: Loading camera 1 failed	Load camera 1 failed.	Initializing of camera 1 failed. Check power, cables and S2N-PCI board.
62	Error 62: Loading camera 2 failed	Load camera 2 failed.	Initializing of camera 2 failed. Check power, cables and S2N-PCI board.
63	Error 63: Loading camera 3 failed	Load camera 3 failed.	Initializing of camera 3 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.
67	Error 67: Camera 3 data bus error	Camera 3 data bus error.	Test data transfer to camera failed. Check cables / connectors to camera 3 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.
71	Error 71: ADC error camera 3	Camera 3 adc error.	Test data transfer through analog digital converter failed. Check cables / connectors to camera 3.
75		General keyboard error	General keyboard error. Check keyboard and cables.
82	Bad scan background Please clear transport	Bad Scan background	Automatic measurement can not be executed. Remove documents from the transport section.
99		Internal error.	The firmware has detected an internal error of unknown cause.

C.8 Warnings

Warning #	Warning shown in the display	Warning sent to application	Problem description
83	Scan background was changed	Scan background was changed	The background was changed. Repeat scan sequence to correct the measured value. Warning will disappear.
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	General information about the camera adjustment. Check for details and readjust.
160	W160 NO WHITE BALANCE DATA	No white balance data	No white balance data was found. Perform white balance.
180		Deskew failed	The deskew function failed. Reposition document.
181		Stitching2D: out of memory. Using fixed stitching	There is not enough memory available to complete the stitching function.
182		Stitching2D: bad matching. Using fixed stitching	2D stitching can not deliver a matching result. Switch to “Fixed” stitching.

C.9 Information

Infor-mation #	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 Width	38 inch / 965 mm
Scan Width:	Max. 36 inch / 915 mm
Resolution	1200 dpi
Sensor Type:	3 linear CCD, encapsulated and dust-proof
	12bit grayscale (internal resolution)
	36bit color (internal resolution)
Sensor Resolution:	68.400 pixels (3x 22.800)
Scan Modes:	24 bit color, 8 bit indexed color
	8 bit gray scale
	1 bit Black/White

Illumination:

Light Source:	Two lamps with 130 white LEDs each
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	< 35 dB(A) (Operating) < 25 dB(A) (Stand-by)

D.3 Electrical Specifications

This device is Energy Star compliant.

Voltage	100–240V AC
Frequency	50/60 Hz

Power Consumption

Sleep	0.1 W
Stand-by	4 W
Ready to scan, lamps off	60 W
Scanning	110 W

D.4 Dimensions and Weight

Scanner outer dimensions	220 x 1094 x 555 mm (H x W x D)
Scanner outer dimensions (incl. floor stand)	1070 x 1094 x 555 mm (H x W x D)
Weight of Scanner	45,6 kg
Weight of Floor Stand / incl. Paper Output Tray	17,5 kg / 19,7 kg

Wood Transport Box:

Weight of Transport Box	26 kg
Dimension of Transport Box	540 x 1300 x 745 mm (H x W x D)
Total shipping weight	96 kg