Bookeye ® 5 V2/V3

Setup instructions
English

10/2022

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Revision overview

Date	Rev.	Name	Description of change	Reason for change
05.03.2020	1.0	JKN	First draft	First published version
02.06.2020	1.1	JKN	Second draft	Bookeye 5 V2 - Updates of dimensions and weight
20.07.2020	1.2	JKN	Third draft	Correction of a device illustration
31.03.2021	1.3	JKN	Fourth draft	Updated version
07.10.2022	1.4	JKN	Fifth draft	Updated version

Notes on the instructions and the manufacturer

These instructions will help you to safely prepare and perform the setup for the Bookeye® 5 V2/V3 book scanner. The Bookeye® 5 V2/V3 book scanner is referred to as the "scanner" in the following.

The start button is called the "Power button" in these instructions.

Keep instructions available

This manual is part of the scanner.

- Always keep this manual with the scanner.
- Make sure the manual is available to the user.
- Include this manual when selling or otherwise transferring the scanner.

Design features in the text

Various elements of this guide have specified design features. This allows you to easily distinguish the following elements:

normal text

BUTTONS OF THE SCREEN

"menu labels"

➢ Action steps

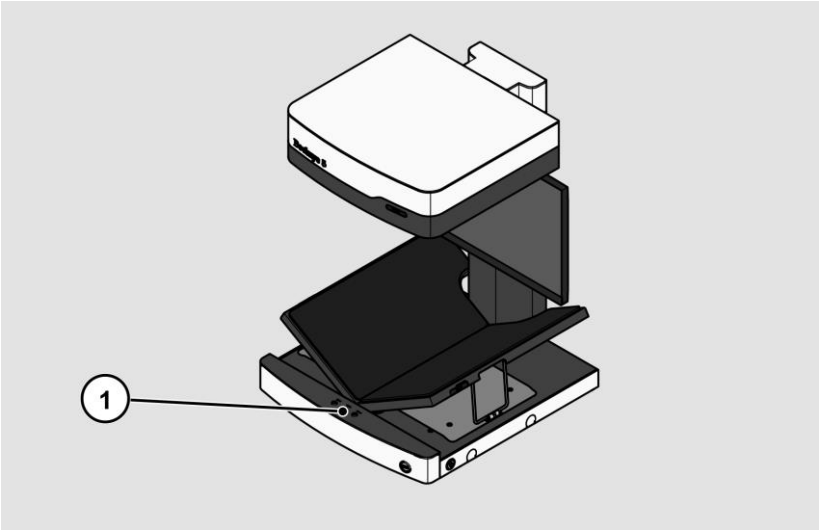
- first level enumeration

Cross-references

Tips contain additional information, such as special details on preparing and executing the setup.

Design features in illustrations

When elements are referred to in a legend or in the running text, they are given a number (1).



Associated documents

The accompanying documents include:

- Unpacking and packing instructions,
- Setup instructions,
- Legal information (EC declaration of conformity, safety and EMC certificates, RoHS etc.).

Copyright

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Device safety

Intended use

The scanner is used to scan images and documents of all types. The documents must comply with the characteristics according to the technical specifications. The scanner is intended for use in closed rooms in the commercial sector.

Intended use also includes reading and understanding this manual as well as observing and following all information in this manual, especially the safety instructions. Any other use is expressly considered improper and will void all warranty and liability claims.

Environmental conditions

Make sure that the scanner is used only under the following environmental conditions:

- Ambient temperature during operation: 5 °C to 40 °C (41 °F - 104 °F)
- Storage temperature: 0 °C to 60 °C (32 °F to 140 °F)
- Relative humidity: 20 to 80 %, non-condensing

➢ Ensure that the scanner is not exposed to direct sunlight.

Basic safety instructions

Avoid injury or death from electric shock

- Never open the scanner case.
- Do not expose the scanner to dripping or splashing water, and do not place liquid-filled containers on the scanner. Liquid penetration can damage the scanner.
- Do not insert objects into the scanner through any slots or openings.
- Connect the scanner only to a properly installed and grounded AC outlet using the supplied AC adapter.
- Do not use the AC adapter if the AC adapter case or cord is damaged. In this case, replace the AC adapter with an AC adapter of the same type.
- Do not use the scanner if it is visibly damaged. In this case, unplug the power cord from the power outlet. Contact Image Access technical support, see section *Technical* Support from page 7.

Avoid burns

- Do not cover the existing openings in the scanner housing. They are used for ventilation. Otherwise, the scanner could overheat.
- Do not place the scanner in front of air conditioners that emit intense heat.

Avoid broken bones, bruises and contusions

Incorrect routing of the cables can cause tripping.

- Lay the connecting cables so that no one can trip over them.

The scanner weighs between 29 kg (64 lbs.) and 33 kg (72 lbs.).

- Handle the scanner only with the help of a second person.
- Place the scanner only on a firm, level and vibration-free surface that has sufficient load-bearing capacity for the weight of the scanner.

Avoid material damage or malfunctions

- To comply with the environmental conditions, ensure good room ventilation.
- Do not place the scanner near equipment that emits strong electromagnetic radiation.
- Always place the scanner on a suitable, stable table or on the optionally available base.
- Do not lean on the scanner.
- Do not use cleaning agents that contain abrasive additives, solvents, or acids. Use a damp microfiber cloth.
- Use only your finger to operate the touch screen. Other objects may damage the touch screen.
- Never lift the scanner by the neck.

Responsibility of the operator

The scanner operator must ensure that only qualified personnel perform the scanner setup.

Personnel qualification

Personnel performing setup of the scanner must be knowledgeable in setting up, connecting, and operating computer accessories.

Design features of warnings

This manual contains the following warnings:

⚠ WARNING	
	Notes with the word WARNING warn of a dangerous situation that can possibly lead to death or serious injury.

⚠ CAUTION	
	Notes with the word CAUTION warn of a situation that may result in minor or moderate injury.

The following symbols are used in the warnings:

Symbol	Explanation
	Danger due to electric shock
	General danger symbol

Design features of notices of damage to property

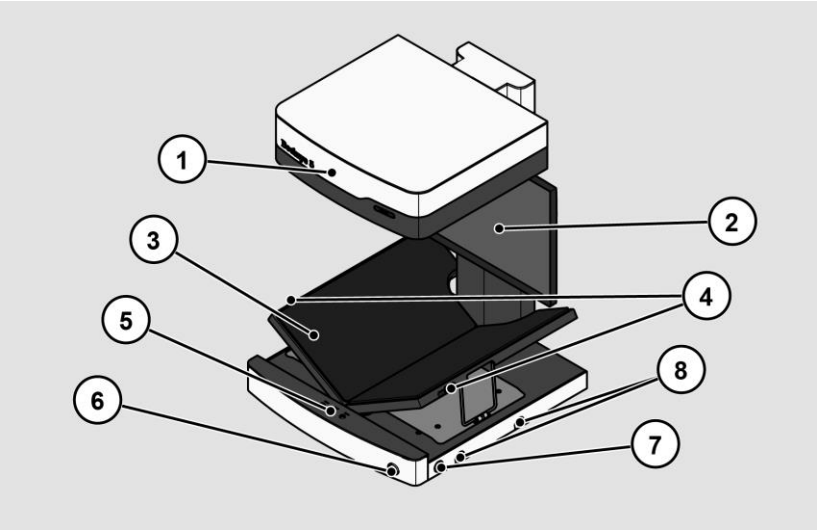
CAUTION!	
	Notes with the word CAUTION warn of a situation that will result in property damage.

Description

Task and function

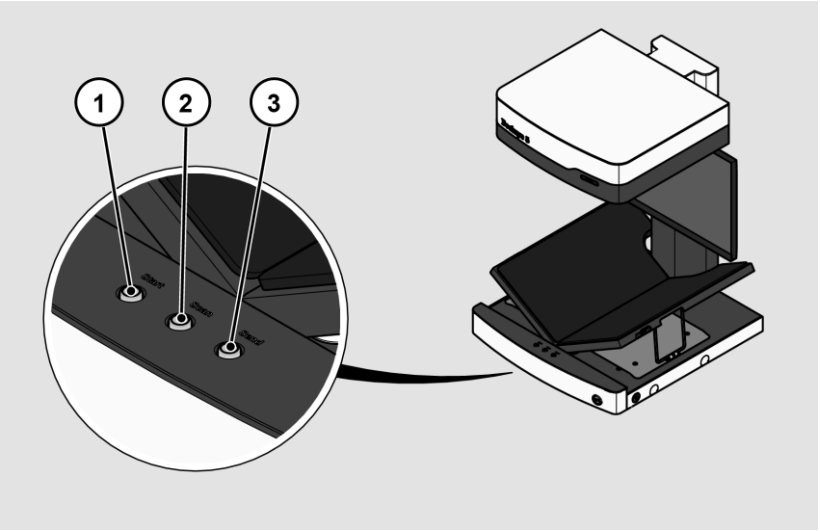
The scanner is used to scan images and documents of all types. The characteristics of the documents, such as size, thickness, etc., must comply with the specifications found in the technical data. The scanner is intended for use in closed rooms in the commercial sector.

Overview Bookeye® 5



No.	Designation
1	Camera head
2	Touchscreen
3	V-shaped book cradle
4	Two additional scan buttons
5	Front panel
6	USB port
7	Power button
8	Two mounting locations for the monitor arm

Control panel buttons

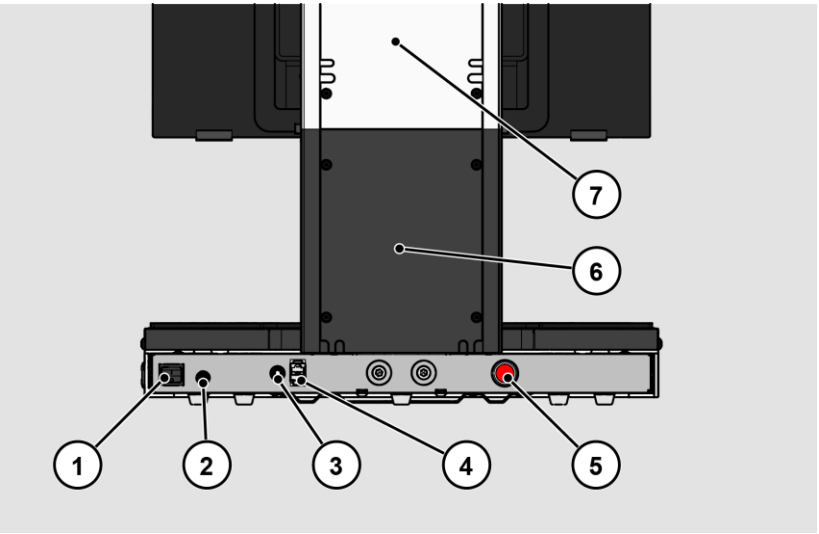


The control panel of the Bookeye® 5 has three buttons with additional functions.

No.	Name	Function
1	Start	Starts a scan job
2	Scan	Starts a single scan.
3	Send	Saves a scan job

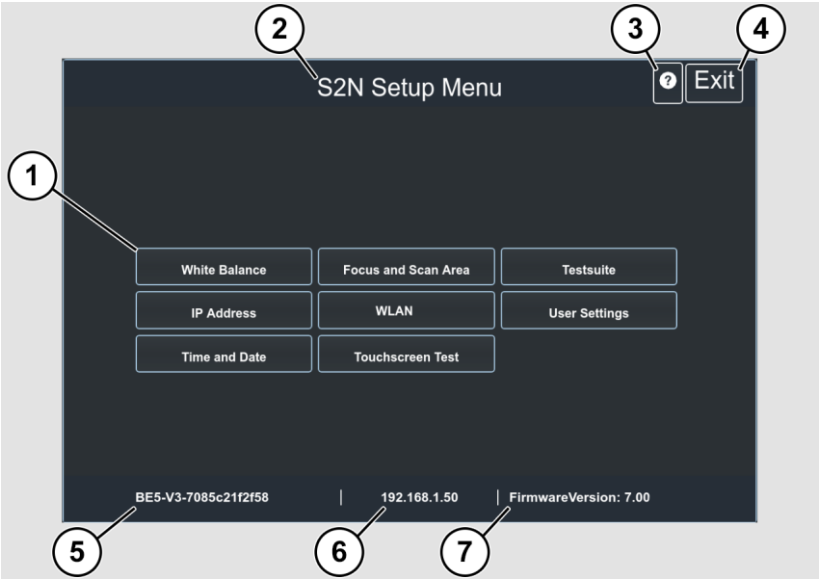
Overview back side

The following figure shows the back of the scanner.



No.	Designation
1	Main switch
2	Connection socket 24 V DC for external power supply unit
3	Connection socket for foot switch
4	Network connection socket
5	Recovery button
6	Rear neck cover, bottom
7	Neck cover rear, top

Overview screen page for the setup menu



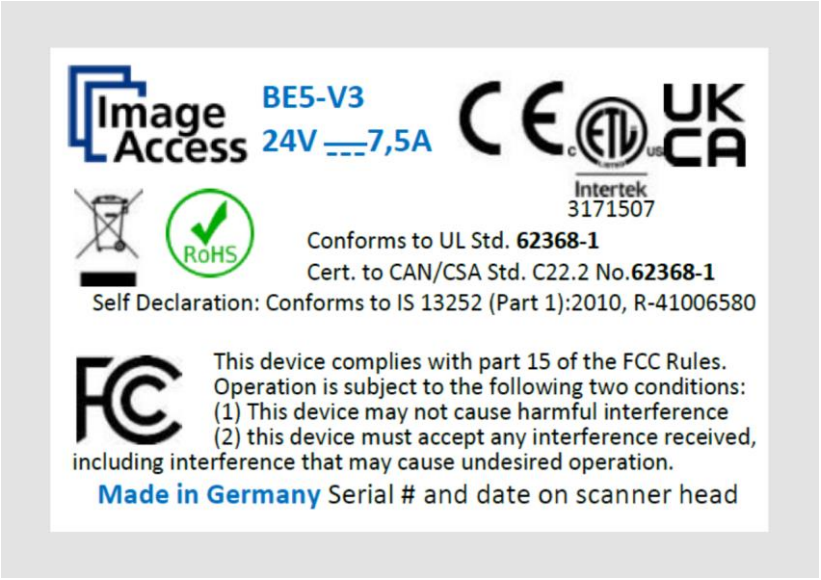
No.	Designation
1	Buttons and parameters
2	Display of the menu designation
3	Display of the online help
4	Button for exiting the setup menu to the start screen
5	Display of the serial number
6	Display of the IP address
7	Display of the firmware version

Rating plate

The rating plate is located on the back of the scanner.

The following figure shows the rating plate of the Bookeye® 5 V2 model.

The following figure shows the rating plate of the Bookeye® 5 V3 model.



Serial number

The serial number of the scanner is located on the back of the scanner head. Keep the serial number handy when calling for support.

User interfaces

The scanner can be operated in five ways.

- Via the touch screen and the ScanWizard Touch user interface.
- Via EasyScan or a client application.
- Via a standard web browser and the ScanWizard Client interface.
- Via the optional Scan2Pad® hotspot.
- Via external scanning applications.

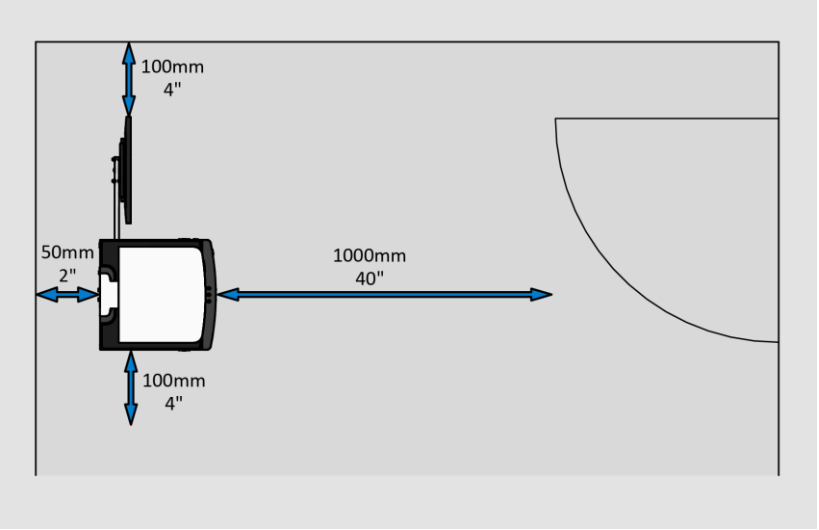
Installation site

Environmental conditions

When operating the scanner, make sure that the room is well ventilated to ensure the operating conditions.

The installation site must be chosen so that

- the side distance between scanner and wall is at least 100 mm (4 inch),
- the distance between the back of the scanner and the wall is at least 0 mm (0 inch),
- the distance to a door or room entrance is at least one meter.



Place the scanner on a level and stable base (at least four table legs). The load-bearing capacity of the base must be suitable for the weight of the scanner (at least 120 kg. / 265 lbs). The dimensions of the base must be suitable for the footprint of the scanner (at least 90 cm x 180 cm / 36 x 71 inch).

After changing from a cold to a warm environment, allow at least one hour for the scanner to adjust to the ambient temperature before turning it on.

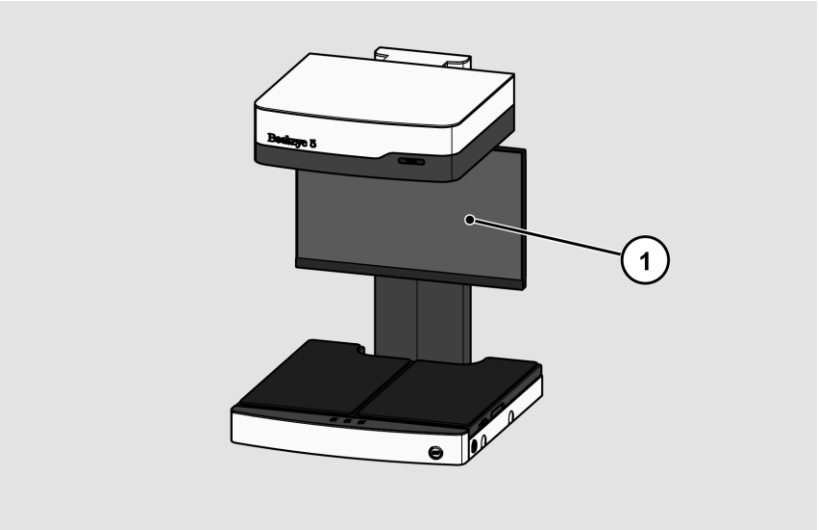
When the scanner changes from a cold to a warm environment, condensation moisture may form inside the housing.

This disappears when the housing temperature has adjusted to the ambient temperature. Condensation moisture can lead to poor scanning results or even damage the scanner.

The scanner location should have a controlled ambient light situation. The light scenarios should avoid direct sunlight or spotlight from light beams. Also, light sources that cause sharp shadows on the document on the book cradles or high levels of ambient light could negatively influence the scan result.

The scanner is an open system with a built-in high quality light source. Open system means that the ambient light is added to the light seen by the camera. Summary of a recommended location for a scanner: The location is not exposed to daylight. It is evenly illuminated from the ceiling with fluorescent lamps that have electronic ballasts. The light intensity measured on the book cradles should be between 300 and 800 lux. The light should not cause any shadows; therefore, the variation of the intensity across the scan area should be kept below 20%. Fluorescent lamps, powered by nonelectronic ballasts, can produce a flicker twice the frequency of the main power supply (100Hz or 120Hz). The same applies to certain simple LED luminaires. If the intensity of this light becomes too high, vertical stripes will be visible on the scan. Direct sunlight will result in overexposed images. Sunlight can also produce distinct shadows. Light beams from spotlights will also change the color of the scans. The scanner has an integrated “White Balance” function. This function will compensate ambient light influences. A “White Balance” calibration is recommended when the light scenario has changed.

Monitor positions



The scanner is shipped with a separately packaged touchscreen monitor. This is used for scanner operation via the ScanWizard user interface.

Please follow the instructions in the supplied Assembly manual.

Prepare setup

Connecting the power supply

WARNING
Risk of electric shock due to incorrect connection. ➢ Ensure that the mains socket is earthed in accordance with local regulations.

CAUTION
Incorrect routing of the connection cables can cause tripping, broken bones, bruises and crushing. ➢ Lay the connection cables so that no one can trip over them.

To connect the power supply, proceed as follows:

- ➢ Make sure the scanner's main power switch is turned off (0 position).
- ➢ Only use the power supply unit and power supply cable included in the scope of delivery.
- ➢ Make sure that the power supply cable is undamaged.
- ➢ Connect the low voltage plug to the appropriate DC connector on the back of the scanner.
- ➢ Connect the power supply's plug to a power outlet with a suitable voltage. (100 to 240 V AC)

Establish network connection

CAUTION	
	Incorrect routing of the connection cables can cause tripping, broken bones, bruises and crushing. ➢ Lay the connection cables so that no one can trip over them.

To establish the network connection, follow the steps below:

- ➢ Connect one plug of the supplied network cable to the network connection jack on the back of the scanner.
- ➢ Connect the second plug to the network connection socket of an existing network.

Connecting the foot switch

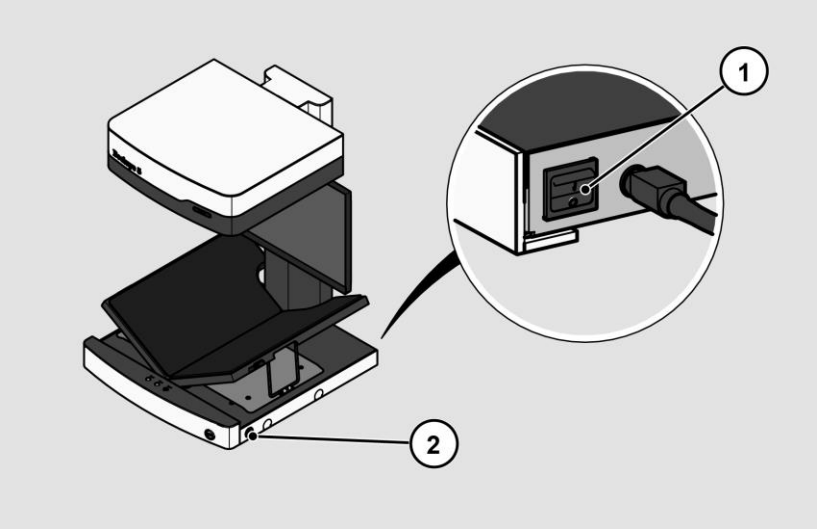
CAUTION	
	Incorrect routing of the connection cables can cause tripping, broken bones, bruises and crushing. ➢ Lay the connection cables so that no one can trip over them.

➢ Connect the foot switch plug to the foot switch connector on the back of the scanner.

Switch on scanner

To switch on the scanner, proceed as follows:

➢ Press the MAIN switch (1) on the rear panel to the "I" position.



The scanner is in stand-by mode.

To exit stand-by mode, proceed as follows:

➢ Press the POWER button (2).

The POWER button lights up blue.

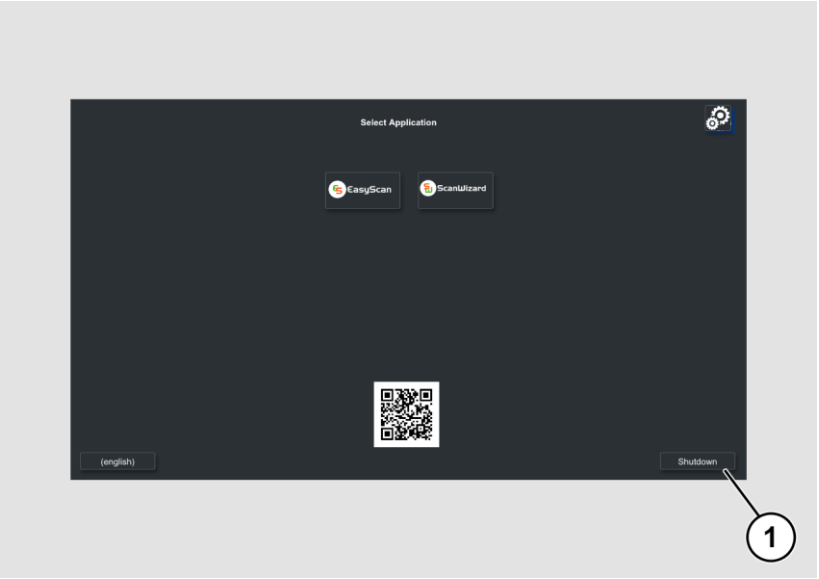
After a short waiting time, the Setup Wizard is displayed on the touchscreen.

Switch off scanner

To switch the scanner to stand-by mode after performing the setup, proceed as follows:

➢ On the Select Application screen, tap POWER OFF (1).

You can also press the POWER button briefly to access this menu. Do not press the POWER button for longer than 5 seconds, otherwise the scanner will switch off hard.



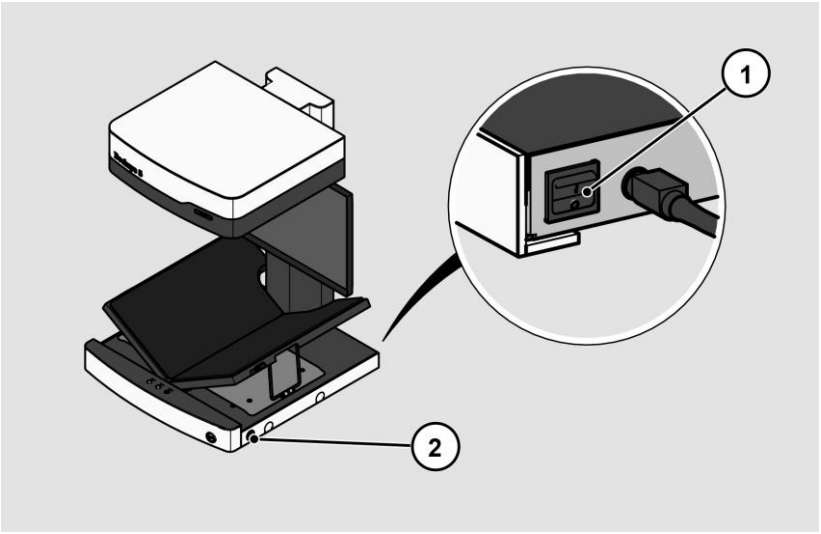
➢ Confirm with YES.

The scanner is shutting down. This process can take up to approx. 40 seconds.

The scanner is in stand-by mode.

If you will not be using the scanner for an extended period of time, you can further reduce power consumption by turning off the stand-by power. To do this, follow the steps below:

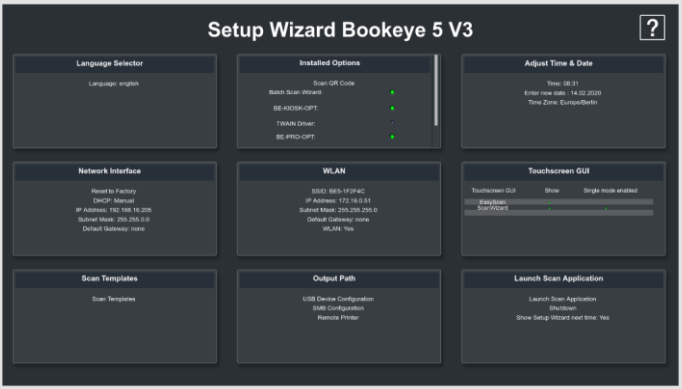
- Make sure the scanner is in stand-by mode.
- Press the MAIN switch (1) to the "0" position.



Perform setup

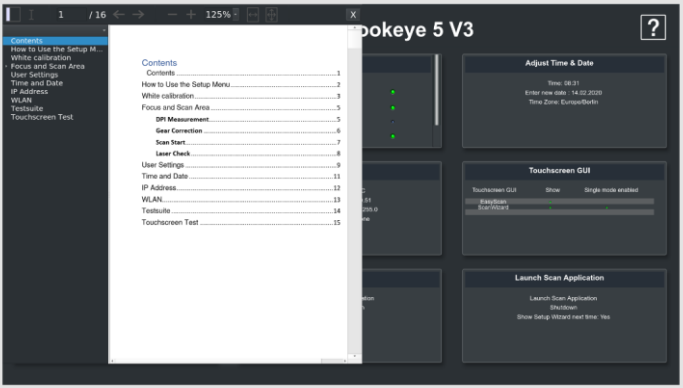
Setup Wizard

The Setup Wizard is displayed on the touchscreen immediately after the startup process is complete.



The Setup Wizard allows the user to perform the most important settings on the touch screen during the initial installation of a Scan2Net scanner. After the Setup Wizard has been successfully completed, the scanner can be used immediately without any further settings.

All user interfaces of the Setup Wizard are described in the online help.



To exit the Setup Wizard you have to deactivate it in the LAUNCH SCAN APPLICATION tile.

Starting the Setup Wizard after booting the scanner can be reactivated in the DEVICE SETUP section of Scan2net.

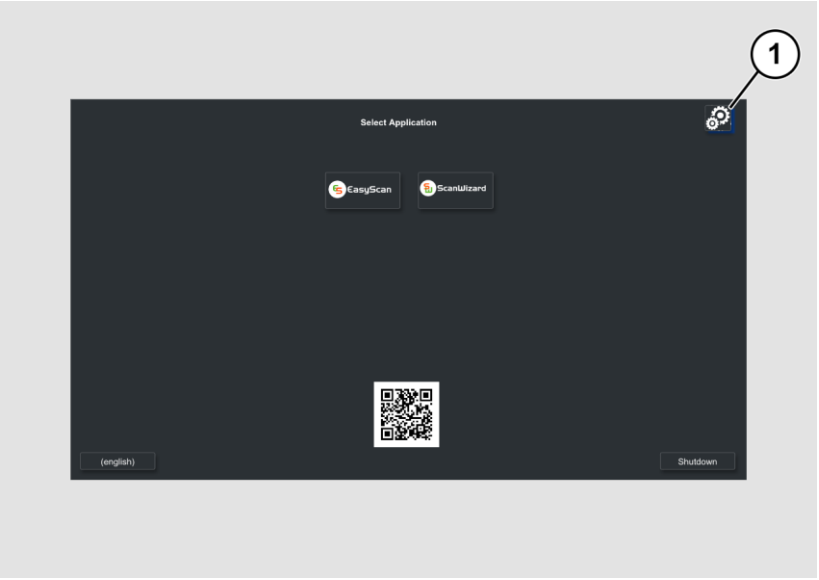
- Open a tab in a web browser and enter the IP address assigned to the scanner in the address bar.
- The Scan2Net window will appear.
- Click the SET DEVICE button, and then click the POWERUSER button.
- Enter "Poweruser" as the login name and password.
- Select the SETUP WIZARD button from the Administrative Settings menu.
- Finally, select YES in the Setup Wizard menu.

Perform calibrations

Activate setup menu

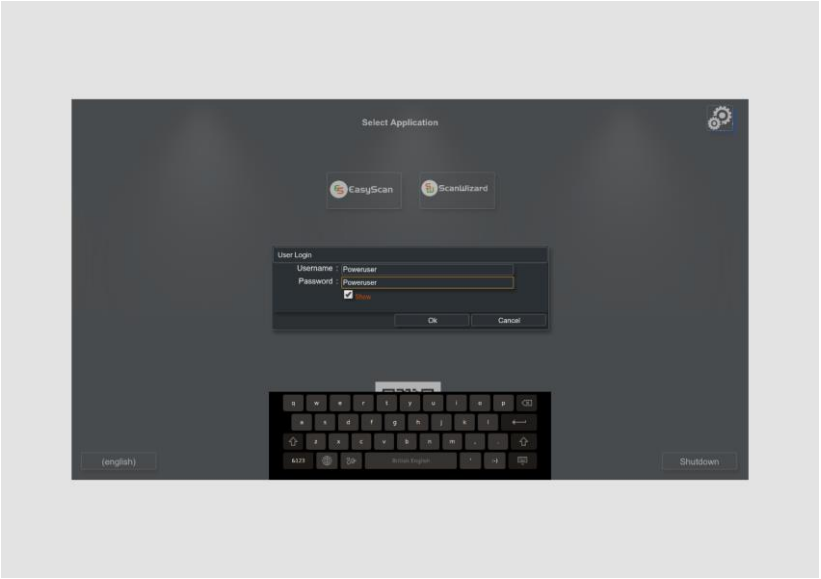
To activate the setup menu, you must log in. To do this, proceed as follows:

➢ Tap on the OPERATION SYMBOL (1).



The login screen is displayed.

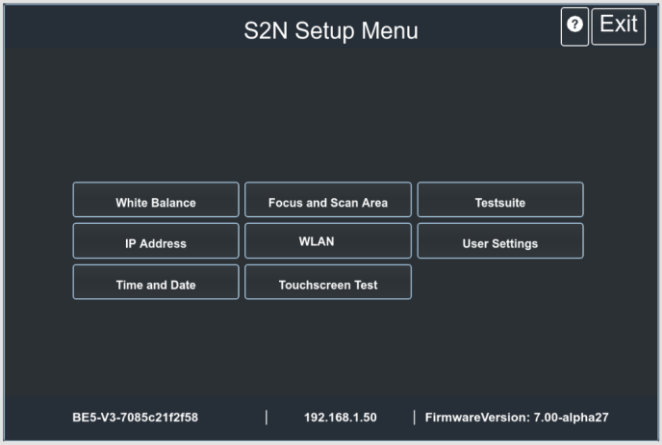
- Enter the login data in the login window.
- To do so, tap the corresponding input field with your finger.
- The on-screen keyboard is displayed.
- Enter "Poweruser" in both input fields.
- Note that the input is case sensitive.



- To complete the registration, tap OK.

The S2N Setup Menu screen appears.

Overview screen page for the setup menu

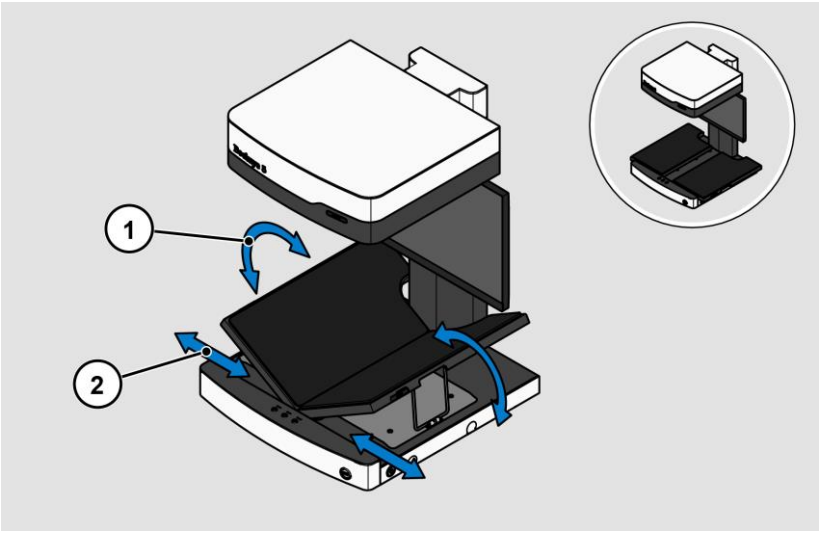


White Balance:	Display the "White Balance" submenu.
Focus and Scan Area:	Display the "Focus and Scan Area" submenu.
Test Suite:	Display the "Test Suite" submenu
IP Address:	Display of the "IP Address" submenu
WLAN:	Display of the "WLAN" submenu
User Settings:	Display of the "User Settings" submenu
Time and Date:	Display of the "Time and Date" submenu
Touchscreen Test:	Display of the submenu "Touchscreen Test".

- To select a submenu on the S2N Setup Menu screen page, tap the corresponding button on the screen page with your finger.
- All user interfaces of the setup menu are described in the online help.

Book Cradle

The Bookeye® 5 V2/V3 is equipped with a book cradle. The book cradle can be used in two modes, in flat position (180°) or in V-position (120°).



The V position is recommended for very delicate, old books and documents. The opening angle between the book cradle plates is 140 degrees. When the book rockers are lifted into the "V" position, they are held by a support leg on each side. In the "V" position, the plates can also be pushed apart horizontally. The small opening angle puts only minimal strain on the book binding.

The book cradle plates can be pushed apart horizontally. The maximum possible distance between the plates is 100 mm (4 inch). This position is particularly suitable for scanning bound originals.

Additional scan buttons

The scan sequence can also be started by pressing one of the two blue scan buttons located on either side of the book cradle plates or by pressing the scan button on the control panel.

System Restore

Solid State Disk Software Error

The file system and Linux operating system of a Scan2Net scanner are very robust and fault tolerant. The file system is capable of repairing itself even if the system loses power during a hard drive write, which would almost certainly damage any Windows, Android, or MAC operating system based computer. However, it is still possible for the Scan2Net Linux software on the SSD to become corrupted under certain circumstances. Unexpected power outages, hard shutdowns via the main power switch without a prior controlled shutdown, and other unexpected interruptions to the operating system can cause this type of disruption. In addition, any uncontrolled interruption of a firmware update procedure or other functions that involve writing to main storage (SSD) poses a potential risk to the integrity of the firmware on the SSD. The Scan2Net operating system of any WideTEK® or Bookeye® scanner is Linux based and although it is very rare, Linux can be corrupted like any other operating system.

If the Linux operating system or other parts of the SSD are damaged, there is still no need to replace the SSD, at least not until the recovery procedure is performed once. These recovery procedures are similar to the procedures necessary to restore other operating systems to a previous state.

Recovery points

Up to two backup copies of the Scan2Net Linux operating system are stored on the internal SSD. The first copy is created during manufacturing. This is the restore point labeled "Factory Default". The second can be created by the user at any time. This is the restore point labeled "User Settings".

System Restore to Factory Defaults

The recovery procedure is a simple process:

Step	Action
1	Turn off the scanner either from the touchscreen, from the Scan2Net application currently in use, or by pressing the POWER button. If the device does not go into standby mode, press and hold the POWER button for more than 5 seconds to hard-switch the scanner into standby mode. If the device does not hard-switch into stand-by mode, press the MAIN SWITCH to the "0" position to turn off the scanner.

Make sure that the following process is not interrupted by a hard shutdown or power failure.
If this process is interrupted, loss of the system restore point is possible, so the SSD must be physically replaced.

The following process cannot be influenced by the user.

Step	Action
2	Make sure the main power is on and the scanner is in standby mode.
3	Press and hold the red RESET button on the back of the scanner before turning it on! Turn on the scanner by pressing the POWER button. Note: During the power-up process, the RESET button must be pressed and held until it lights up continuously!
4	Restoration of the file system will begin immediately. This process takes about 1 - 2 minutes. At the end of the recovery process, the scanner will automatically reboot.

System recovery of user settings

Set system restore point

Step	Action
1	Open a tab in a web browser and enter the IP address of the scanner.
2	The Scan2Net window appears.
3	Click SETUP DEVICE, and then click POWERUSER.
4	Enter "Poweruser" as the user name and password.
5	Select SYSTEM RESTORE from the RESETS AND DEFAULT VALUES menu.
6	Select SET RESTORE POINT.

Please wait until the process is complete and the READY message is displayed. The entire process takes about 1 - 2 minutes.

System Restore

Step	Action
1	Open a tab in a web browser and enter the IP address of the scanner.
2	The Scan2Net window appears.
3	Click SETUP DEVICE, and then click POWERUSER.
4	Enter "Poweruser" as the username and password.
5	Select SYSTEM RESTORE from the RESET & DEFAULT VALUES menu.
6	Select RESTORE SYSTEM.

The unit restarts immediately. The system recovery is then performed. This procedure takes approximately 1 - 2 minutes. To complete the procedure, the device performs a second restart of the restored system.

End of the system recovery procedure.

Cleaning

To keep the scanner in good working condition, make sure it is free of dust, ink, grease, and other contaminants. Scanners are high resolution optical instruments with high quality glass parts. Since a higher quality scanner will reveal smaller particles of dirt and dust better than a lower quality scanner, special care must be taken to keep all parts, and especially all glass parts, as clean as possible.

The cleaning intervals are determined by the scanner environment and the type of documents scanned, as well as the frequency of use. The scanner should be cleaned under the following circumstances.

- When sporadic or frequent image quality problems occur.
- When sporadic or frequent cropping problems occur even though the document is in the correct area of the scan area.

To avoid electric shock and other potential damage, make sure the scanner is turned off and unplugged before cleaning. Do not allow water to enter the scanner.

Proper general cleaning should include the following:

- Use an electric vacuum cleaner to remove dust from all parts before proceeding to clean other parts of the product. Be careful not to touch any parts with the dust cleaning hose.
- Clean the outer surface of the Product with a damp cloth. Dampen the cloth and wring it out as much as possible. For best results, use a microfiber cloth.
- The glass surfaces of the scanner should only be cleaned using a soft, lint-free cloth.
- Use a mild soap and water solution only when necessary. Do not use abrasive cleaners.
- Wipe the product dry with a soft, lint-free cloth. Be especially careful when cleaning the touch screen.

Technical Specifications

Optical System

Maximum scanning area (V2)	460 × 620 mm (40 to 105 °F), 14 % larger than DIN A2
Maximum scanning area (V3)	390 × 480 mm (15.3 x 18.9 inch), 50 % larger than DIN A3
Scanner resolution	400 × 400 dpi (optional 600 × 600 dpi)
Pixel size	9.3 × 9.3 µm
Smallest document size	100 × 100 mm (4 × 4 inch)
Camera	CCD line sensor, 22,500 pixels (11,000 scanning lines equivalent to a 245 MPixel matrix camera)
Live preview camera	CMOS matrix, area sensor
Colour depth	48 bit color, 16 bit greyscale
Scan Modes	24 bit color, 8 bit grayscale Bitonal, Halftone
File formats	Multipage PDF (PDF/A) and TIFF, JPEG, JPEG 2000, PNM, PNG, BMP, TIFF (Raw, G3, G4, LZW, JPEG), AutoCAD DWF, JBIG, DjVu, DICOM, PCX, Postscript, EPS, Raw data etc.

Electrical Specifications

External Power Supply

Voltage	100 to 240 V AC
Frequency	47 to 63 Hz
Operating Temperature	0 to 40 °C (32 °F to 104 °F)
Relative Humidity	20 to 80 % (non-condensing)
ECO Standard	CEC Level VI

Scanner

Voltage	24 V DC
Current	Max. 7.5 A

Illumination System

Light source	White LEDs, tested according to IEC 62471, no UV /IR radiation
Warm-up time	none
Temperature dependency	none
Lamp lifetime	50,000 hours (typ.) LEDs are covered by the Extended Warranty Option.

Power consumption

Sleep mode	< 0,5 W
Stand-by	1,5 W
Ready to scan, monitor on	40 W
Scanning	110 W

Dimensions and Weight Bookeye® 5 V2

External dimensions of the scanner (H x W x D)	720 x 655 x 645 mm (28 x 26 x 25 inch)
Weight of the scanner	33 kg (73 lbs.)
Dimensions of the transport box (H × W × D)	910 × 800 × 800 mm (36 × 31 × 31 inch)
Total weight, ready for shipment	50 kg (110 lbs.)

Dimensions and weight Bookeye® 5 V3

External dimensions of the scanner (H x W x D)	720 x 510 x 540 mm (28 × 20 × 21 inch)
Weight of the scanner	29 kg (64 lbs.)
Dimensions of the transport box (H × W × D)	800× 630 × 720 mm (31 x 24 x 28 inch)
Total weight, ready for shipment	43 kg (95 lbs.)

Ambient Conditions

Operating Temperature	5 to 40 °C (40 °F to 105 °F)
Storage Temperature	0 to 60 °C (32 °F to 140 °F)
Relative Humidity	20 to 80 % (non-condensing)
Ambient Luminance	< 800 lux
Noise	< 48 dB(A) (Lift & opening motors) < 42 dB(A) (Scanning) < 33 dB(A) (Stand-by)

End of the document

More Bookeye® 5 V2/V3 book scanners - Documentation

To achieve the best possible results with your Bookeye® 5 V2/V3 book scanner and to fully understand its operation, you should always have the latest version of the manuals, instructions, and other product documentation. The printed version may already be out of date. You can use the respective QR code or hyperlink shown here to check whether your product documentation is complete and up to date. The documents are available in English, German, Spanish and French.

BE5-V2

https://www.imageaccess.de/?page=ScannersBE5-V2Documentation&lang=en

BE5-V3

https://www.imageaccess.de/?page=ScannersBE5-V3Documentation&lang=en