seca 515/514
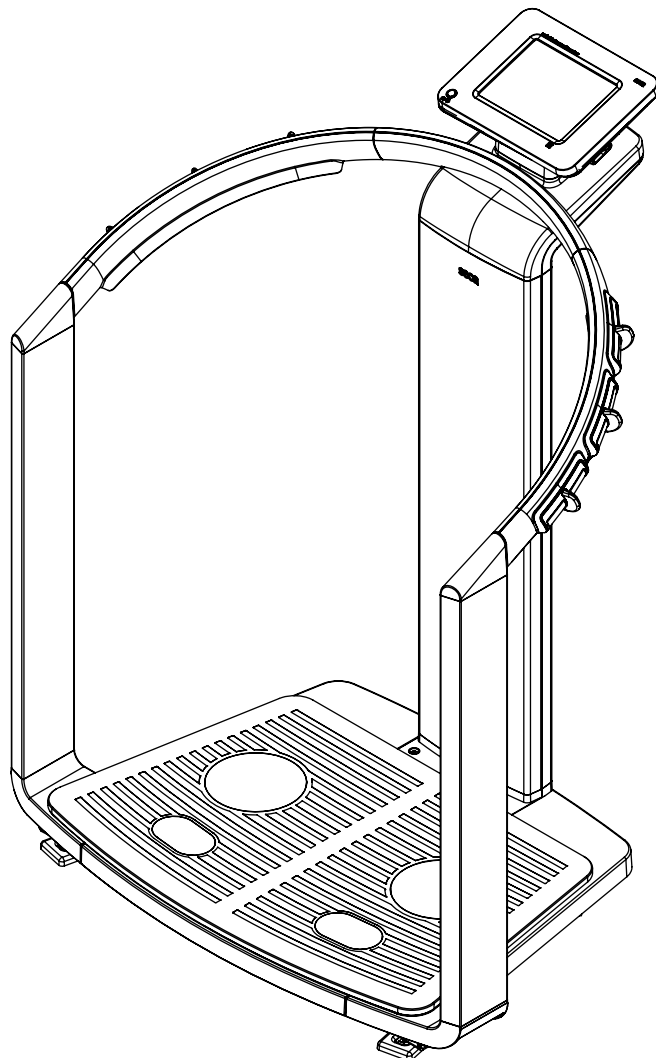
Administrator Manual

Software version 1.1 from
Build 550

CONTENTS

1. DEVICE DESCRIPTION

1.1 Intended use

The medical Body Composition Analyzer **seca 515/514** is mainly used in hospitals, medical practices and inpatient care facilities in accordance with national regulations. The **seca 515/514** device records weight, height and bio-electric impedance measurements and parameters, e.g. fat-free mass (FFM), which can be derived from them for automatic calculation. The results are displayed graphically and assist the attending physician with the following medical issues:

- determining energy expenditure and energy reserves as a basis for nutritional advice
- assessing metabolic activity and the success of a training program, e.g. within the framework of rehabilitation or physiotherapy
- determining a patient's fluids status
- determining general state of health or, in the case of a previously-known disease, assessing its severity

The **seca 515/514** is **not** a diagnostic device. To make an accurate diagnosis, the physician needs to commission thorough examinations and take their results into account in addition to the results of the **seca 515/514**.

1.2 Description of function

Calculating weight and height

The device uses an electronic scale. Weight is recorded across 4 load cells. Height is recorded via manual entry or via wireless transmission from a **seca 360°** stadiometer.

Bioimpedance measurement

Bioimpedance is measured according to the 8-point method. The flow of the low alternating current and the measurement of impedance are performed for each side of the body using a pair of foot electrodes and 3 pairs of hand electrodes. The hand electrodes are attached at different heights so that persons with a height of between 1.60 m and 2.0 m can adopt the ideal position on the device for a bioimpedance measurement.

Administering patient data

seca patient files can be created directly on the device for administering measured results. The seca patient files are stored in the patient database of the **seca analytics 115** PC software supplied. Alternatively, seca patient files can be saved on the USB memory stick supplied. The USB memory stick likewise contains a seca patient database.

seca patient files and seca patient databases contain exclusively data necessary for working with seca products or determined using seca products. seca patient files can be administered and edited only using the **seca 115** PC software. The export and import functions of the **seca 115** PC software can be used for exchanging data with surgery and hospital information systems.

Evaluation

Bioimpedance measurements are evaluated in graphical form based on scientifically-established formulas. An in-house study by seca established formulas for determining the parameters of total body water (TBW), extracellular water (ECW), fat-free mass (FFM) and skeletal muscle mass (SMM) for arms, legs, torso and the whole body. In the same studies, in-house reference values were determined for the following parameters, in order to allow normal ranges to be shown: bioelectric impedance vector analysis (BIVA), mass indices (FMI, FFMI), phase angle (φ). You can find further information in the Instructions for Use for Physicians and Assistants.

Administration of user data
Access data for users of the device is administered in the **seca 115** PC software supplied. A user PIN for the **seca 515/514** is generated automatically when user accounts for the **seca 115** are created. The administrator also has the option of specifying a user PIN him or herself.

The device can only be configured with administrator rights. An initial administrator PIN for the device is provided. It can only be changed on the device.

The creation and administration of user data is only necessary if the seca patient database of the **seca 115** PC software is to be accessed from the device.

Data transmission and network functions
The device is networkable. The network connection allows the device to use both the seca patient database and the special print function of the **seca 115** PC software.

The special print function of the **seca 115** PC software makes it possible to start printing out a detailed results report directly on the medical Body Composition Analyzer **seca 515/514**.

Alternatively to the Ethernet link, seca mBCAs and the **seca 115** PC software can communicate wirelessly via **seca 360°** technology. For this purpose, the **seca 360° wireless USB adapter 456** (included in the scope of delivery) must be connected to a PC on which at least the application software of the **seca 115** is installed.

seca 360° stadiometers can wirelessly transmit measured results to the device.

The device has the following interfaces:

- on the weighing platform
    - network connection (Ethernet)
- on the touchscreen display
    - internal seca wireless module
    - USB interface for connecting a USB memory stick (included in the scope of delivery)

Compatibility
This device (software version 1.1 from Build 550) is compatible only with version 1.4 from Build 560 of the **seca 115** PC software. There is no downward compatibility with older versions of the **seca 115**. For a summary of technical modifications, see the section entitled "Technical modifications" on page 56.

seca mBCAs with older device software can be updated. Go to www.seca.com and contact your local seca service partner.

1.3 User qualification

Administration/network connection
The device may only be set up and incorporated in a network by experienced administrators or hospital technicians.

Measuring mode
The device and the **seca 115** PC software may only be operated by persons with sufficient specialist expertise.

1.4   Contraindications

Bioimpedance measurements may **not** be performed on patients exhibiting the following characteristics:

- electronic implants, e.g. cardiac pacemakers
- active prostheses

Bioimpedance measurements may **not** be performed on persons who are connected to one of the following devices:

- electronic life-support systems, e.g. artificial heart, artificial lung
- portable electronic medical devices, e.g. ECG devices or infusion pumps

Impedance measurements may only be performed on persons exhibiting the following characteristics after discussion with the attending physician:

- cardiac arrhythmias
- pregnancy

2. SAFETY INFORMATION

2.1 Safety instructions in these instructions for use

⚠️ **DANGER!**
Identifies an exceptionally hazardous situation. If you fail to take note of this information, serious irreversible or fatal injury will result.

⚠️ **WARNING!**
Identifies an exceptionally hazardous situation. If you fail to take note of this information, serious irreversible or fatal injury may result.

⚠️ **CAUTION!**
Identifies a hazardous situation. If you fail to take note of this information, minor to moderate injury may result.

ATTENTION!
Indicates that the product may have been operated incorrectly. If you fail to take note of this information, the device may be damaged or the measured results may be incorrect.

NOTE:
Contains additional information on how to use this device.

2.2 Basic safety instructions

Handling the device
▶ Please take note of the instructions in these instructions for use.

▶ Keep the instructions for use in a safe place. The instructions for use are a component of the device and must be available at all times.

⚠️ **DANGER!**
Risk of explosion
Do not use the device in an environment in which one of the following gases has accumulated:

▶ oxygen

▶ flammable anesthetics

▶ other flammable substances/gas mixtures

⚠️ **CAUTION!**
Hazard to patient, damage to device

▶ Additional devices connected to medical electrical devices must provide evidence of compliance with the relevant IEC or ISO standards (e.g. IEC 60950 for data-processing devices). Furthermore, all configurations must comply with the requirements of standards for medical systems (see IEC 60601-1-1 or Section 16 of the 3rd edition of IEC 60601-1 respectively). Anyone connecting additional devices to medical electrical devices is considered a system configurer and is therefore responsible for ensuring that the system complies with the requirements of standards for systems. Your attention is drawn to the fact that local laws take precedence over the above-mentioned requirements of standards. In the event of any queries, please contact your local specialist dealer or Technical Service.

▶ Please have maintenance, subsequent verification (**seca 515** only) and BIA measuring technology checks performed every two years.

▶ Technical modifications may not be made to the device. The device does not contain any parts for servicing by the user. Please only have maintenance, technical checks and repairs performed by an authorized service partner. You can find a service partner in your area at www.seca.com or by sending an e-mail to service@seca.com.

▶ Use only original accessories and seca spare parts, otherwise seca will not grant any warranty.

CAUTION!

Hazard to patient, malfunction

► Keep other medical devices, e.g. high-frequency surgical devices, at a minimum distance of approx. 1 meter to prevent incorrect measurement or wireless transmission interference.

► Keep high-frequency devices such as cellphones at a minimum distance of approx. 1 meter to prevent incorrect measurement or wireless transmission interference.

► The actual transmission output of high-frequency equipment may require minimum distances of more than 1 meter. For details, go to www.seca.com.

Preventing electric shock

WARNING!

Electric shock

► Set up devices which can be operated with a power pack so that the power supply socket is within easy reach and the power supply can be quickly disconnected.

► Ensure that your local power supply matches the details on the power pack.

► Never touch the power pack with wet hands.

► Do not use an extension cable and multiple outlets. This also applies to the USB connection on the touchscreen display.

► Make sure that the power cable is not crushed and cannot be damaged by sharp edges.

► Do not operate the device above an altitude of 3000 m.

Preventing injuries and infections

WARNING!

Hazard to patient

► Subject the device to a hygiene treatment after each measurement (see "Troubleshooting" on page 51).

► Ensure that the patient does not have any contagious diseases.

► Ensure that the patient does not have any open wounds on the palms of their hands or the soles of their feet.

► Ensure that the device is steady and level.

► The device is not designed as a standing aid. Assist people with limited mobility, e.g. when they are getting up from a wheelchair.

► Ensure that the weighing platform is dry before the patient steps onto it.

► Ensure that the patient has dry feet before stepping onto the weighing platform.

► Ensure that the patient does not step directly onto the edges of the weighing platform.

► Ensure that the patient steps onto the weighing platform slowly and safely.

► Route the network and power cables such that no one can trip over them.

WARNING!

Risk of infection

► Before and after every measurement, wash your hands to reduce the risk of cross-contamination and nosocomial infections.

► Hygienically reprocess the scale regularly as described in the respective section in this document.

► Make sure that the patient has no infectious diseases.

► Make sure that the patient has no open wounds or infectious skin alterations, which may come into contact with the device.

Preventing device damage

ATTENTION!
Damage to device

► Make sure that fluids never get inside the device. These can destroy the electronics.

► Switch off the device before you disconnect the power pack from the power supply.

► If the device is not be used for an extended period, disconnect the power pack from the power supply. Only then is the device de-energized.

► Do not drop the device.

► Do not subject the device to shocks or vibrations.

► Do not place the device in direct sunlight and make sure that it is not placed in the direct proximity of a heat source. The excessive temperatures could damage the electronics.

► Perform a function check at regular intervals as described in the corresponding section in the "Instructions for Use for Physicians and Assistants". Do not operate the device if it is not working properly or is damaged.

► Avoid rapid temperature changes. If the device is transported so that a temperature difference of over 20 °C occurs, the device must be left to stand for at least 2 hours before it is switched on, otherwise condensation may form; this can damage the electronics.

► Use only disinfectants free of chlorine and alcohol and which are explicitly suitable for acrylic sheet and other sensitive surfaces (active ingredient: quaternary ammonium compounds, for example).

► Do not use aggressive or abrasive cleaning agents.

► Do not use organic solvents (e.g. white spirit or petroleum spirit).

Dealing with measuring results

WARNING!
Hazard to patient
The **seca 515/514** is **not** a diagnostic device. The device assists the attending physician in reaching a diagnosis.

► To reach a precise diagnosis and to initiate therapies, the attending physician must have thorough examinations conducted and take the results of these into consideration, as well as using the **seca 515/514**.

► The responsibility for diagnoses and the therapies derived from them lies with the attending physician.

CAUTION!
Hazard to patient
To prevent misinterpretations, measured results for medical purposes may only be displayed and used in SI units (weight: kilograms, height: meters). Some devices have the option of displaying measured results in different units. This is purely an additional function.

► Only use measurements in SI units.

► The user takes sole responsibility for the use of measured results in non-SI units.

ATTENTION!
Loss of data

► Before you save and re-use values measured with the **seca 515/514** (e.g. in the seca PC software or in a hospital information system), ensure that the measured values are plausible.

► If measured values have been transmitted from the **seca 515/514** device to seca PC software or to a hospital information system, ensure before re-using them that the measured values are plausible and assigned to the correct patient.

ATTENTION!
Measurements from third-party devices not compatible
Bioimpedance measurements performed by devices from different manufacturers are not compatible. Follow-up measurements performed on a device other than a seca medical Body Composition Analyzer may lead to inconsistent data and misinterpreted measured results.

► Ensure that follow-up measurements are also performed on a seca medical Body Composition Analyzer.

Dealing with packaging

WARNING!
Danger of suffocation
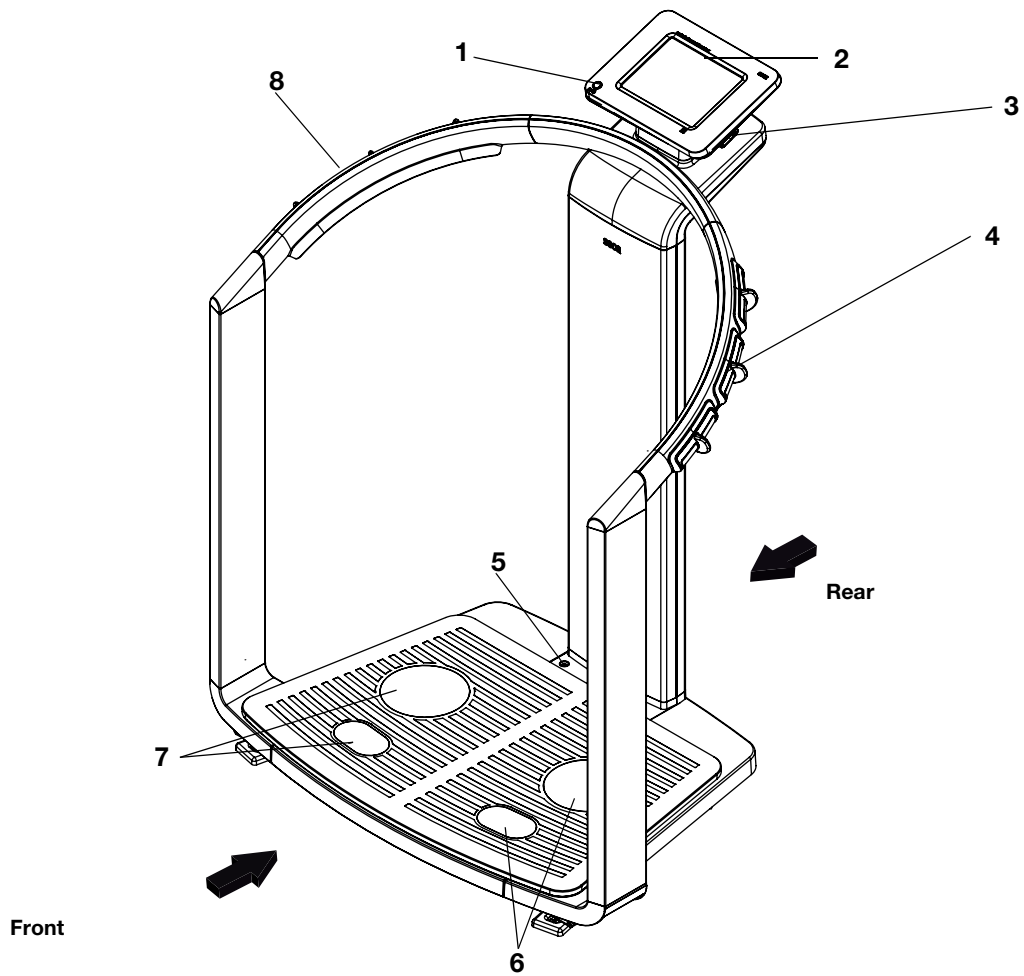Packaging made of plastic film (bags) presents a danger of suffocation.

► Store packaging out of the reach of children.

► If the original packaging is no longer available, only use plastic bags with safety holes to reduce the risk of suffocation.

NOTE:
Store the original packaging for future use (e.g. returning for maintenance).

3. DEVICE OVERVIEW

3.1 Controls

Rear of weighing platform
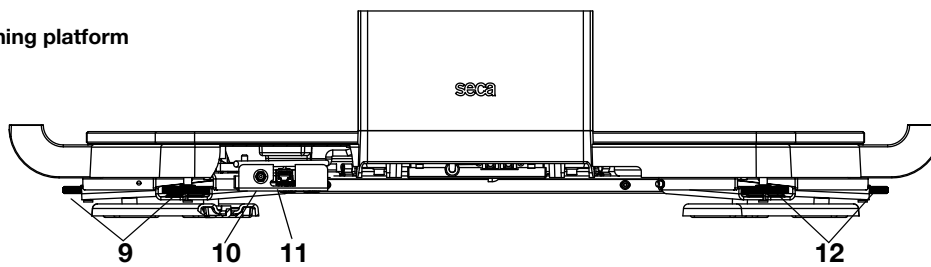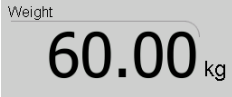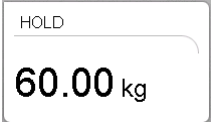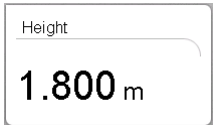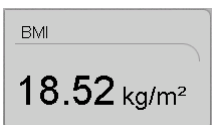
No.	Control	Function
1	ON/OFF button with LED	Switches device on: press button briefly Switches device to standby: press button briefly Switches device off: press button and hold
2	Touchscreen display	Central control and display element, can be swiveled 180° to left and right

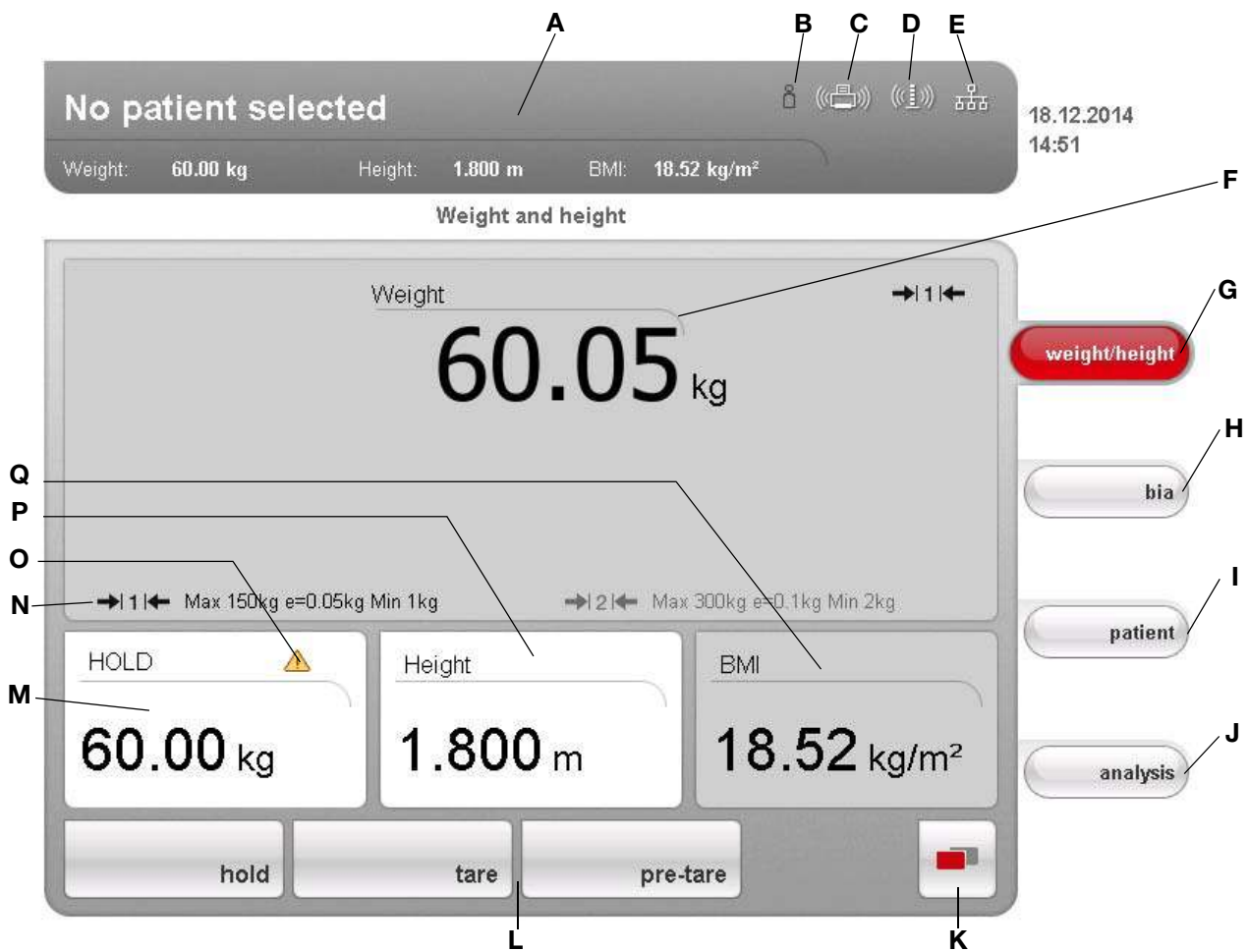| No.	Control	Function
3	USB interface	For connecting a USB memory stick (contained in the scope of delivery) for administering the following data: • creating seca patient files on the device • loading seca patient files from the **seca 115** PC software supplied onto the USB memory stick; calling up data on the device • saving measured results to the USB memory stick • reading out log files from the device (administrator function)
4	Pair of hand electrodes, right	3 pcs. with finger spacers, for bioimpedance measurement The patient selects an electrode pair depending on their height
5	Spirit level	Shows whether the device is horizontal
6	Pair of foot electrodes, right	For heels and balls of feet, for bioimpedance measurement
7	Pair of foot electrodes, left	For heels and balls of feet, for bioimpedance measurement
8	Pair of hand electrodes, left	3 pcs. with finger spacers, for bioimpedance measurement The patient selects an electrode pair depending on their height
9	Foot screws, right	2 pcs, for precise alignment of the device
10	Power pack connection	For connecting the power pack
11	Ethernet interface	For integrating the device in a PC network
12	Foot screws, left	2 pcs, for precise alignment of the device
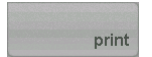
3.2 Symbols in the start display

No patient selected

Weight: 60.00 kg   Height: 1.800 m   BMI: 18.52 kg/m²

18.12.2014
14:51

Weight and height

Weight

→|1|←

60.05 kg

weight/height

bia

patient

analysis

→|1|← Max 150kg e=0.05kg Min 1kg   →|2|← Max 300kg e=0.1kg Min 2kg

HOLD   ⚠

60.00 kg

Height

1.800 m

BMI

18.52 kg/m²

hold   tare   pre-tare
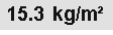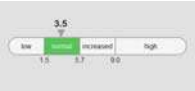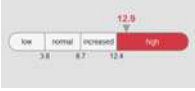
	Symbol	Meaning
A	John Scott	Header, remains unchanged in all menu levels and tabs. The following data are displayed: • patient data - name - weight - height - BMI • data connections • date/time
B	👤	Login symbol: indicates whether the user is logged in to a seca patient database (user PIN required)
C	((🖨))	Printer symbol: indicates whether the print function of the **seca 115** PC software is available
D	((⬚))	Measuring rod symbol: indicates whether there is a connection to a **seca 360°** stadiometer

	Symbol	Meaning
E		Data connection symbol: indicates the current type of connection to the seca patient database (in this case Ethernet connection between PC and **seca 115** Additional possible connection types: • ((•)) **seca 360°** wireless connection between PC and **seca 115** • USB memory stick connected to device
F	Weight **60.00** kg	Weight display
G	weight/height	**weight/height** tab Automatically active after device is switched on For determining weight and height of patient
H	bia	**bia** tab For performing a bioimpedance analysis
I	patient	**patient** tab For assigning the measured results to a seca patient file
J	analysis	**evaluation** tab For evaluating measured results and analysis results and for saving data

K		**menu changeover** button
		Appears if secondary menu is available
		• Primary menu: contains the functions commonly used in the current context
		• Secondary menu, contains the following functions:
		  - **settings**
		  - **print**
		  - **save**

L	hold tare pre-tare	Menu bar with context-dependent buttons and **menu changeover** button
M	HOLD **60.00** kg	Hold value display
N	⊣1⊢	Weighing range currently in use: • 1: finer divisions of the weight display at a lower capacity • 2: maximum capacity
O	⚠	Non-verifiable function is active (for verified models only)
P	Height **1.800** m	Display of patient's height • Can be entered manually • Can be received by a **seca 360°** stadiometer
Q	BMI **18.52** kg/m²	Display of patient's body mass index (BMI) Calculated automatically as soon as a weight is available and a height value has been received or entered

3.3 Color symbols and other controls
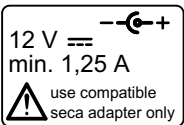
Control/display	Symbol	Meaning
ON/OFF button		LED white: device on
		LED green: device on standby
		LED off: device off
Data connection symbol, in this case **seca 360°** wireless link between a PC and **seca 115**		White: connection available
		Red: data being transmitted on the available connection
		Gray: connection not available
Login symbol: log in to a seca patient database		White: user is logged in
		Gray: no user logged in
Tab	bia	White: tab not selected
	bia	Red: tab selected
Buttons	tare	Light gray: function available
	tare	Gray: button pressed, function selected
	print	Dark gray: function not available
Electrode indicator (for bioimpedance measurement)	Hand, left	Red: contact poor
	Hand, right	Green: contact good
Drop-down triangles		Gray: function available
		Light gray: function not available
Checkboxes		No tick: function deactivated
		Tick: function activated

Control/display	Symbol	Meaning
Drop-down menu	Units ▼	Selected function
	Units ▼ ✓ Units / Region / Date/time / Ethernet network / seca CLS network / Wireless network / Monitor & sound / Versions / System	Drop-down menu open
Text color	28.6 kg/m²	Red text: value outside normal range
	15.3 kg/m²	Gray text: value within normal range
Display, evaluation		Green: Value within normal range
		Orange: Value slightly elevated
		Red: Value outside normal range

3.4   Menu structure

```
settings ──► System ──► Read off calibration counter
                    └─► Show/hide default module selection
                        before BIA measurement

user ──► Default module selection ──► Activate/deactivate modules
                                      for default module selection

         Unit changeover ──► Set weight units
                          ├─► Set energy units
                          └─► Set height unit

         Region ──► Set setup location
                 ├─► Set language
                 ├─► Set date format
                 ├─► Set time format
                 ├─► Set name format
                 └─► Set name hyphen

         Date/time ──► Set date
                    └─► Set time

admin    Ethernet network ──► View current settings
                          ├─► Activate/deactivate DHCP
                          └─► Set up Ethernet ──► Enter IP address
                                             ├─► Enter netmask
admin PIN                                     ├─► Enter domain name server
                                              └─► Enter default gateway

         seca CLS network ──► Enter IP address
                          └─► Enter port

         Wireless network ──► Activate/deactivate wireless module
                          ├─► Set up wireless group
                          └─► View wireless devices

         Monitor & sound ──► Set display brightness
                         └─► Set volume

         Versions

         System ──► Export system log file
                 ├─► Change administrator PIN
                 ├─► Calibrate touchscreen display
                 └─► Reset admin settings

         Service: primary functions ──► Change GAL value ──► For authorized service
                                    ├─► Calibrate device ──┘    engineers only
service ──► For authorized         ├─► Set the quality check
            service engineers only ├─► Update device software
                                   └─► Export/import settings
```

16 •

3.5 Identification on the device and the type plate

Text/symbol	Meaning
Mod	Model number
Approval Type	Type designation of design approval (**seca 515** only)
S/N	Serial number, consecutive
ProdID	Product identification number, consecutive
	Follow instructions for use
	Medical electrical device, type BF
	Insulated device, protection class II
	Device complies with EC standards and directives. • **M**: Conformity label according to Directive 2014/31/EU governing non-automatic weighing instruments (verified models) • **16**: (Example: 2016) Year in which the declaration of conformity was completed and the CE symbol was applied (verified model) • **0102**: Notified body metrology (verified models) • **0123**: Notified body medical products
	Class III scale to Directive 2014/31/EU and OIML R76-1 (verified models)
	FCC symbol (USA)
FCC ID	For USA: device license number from the Federal Communications Commission (FCC)
IC	For Canada: device license number from Industry Canada
12 V === -−(●+ min. 1,25 A ⚠ use compatible seca adapter only	Operate device only with an original seca power pack
	USB interface
	Do not dispose of device with household waste

3.6   Identification on the packaging

	Protect from wet
	Arrows point to top of product Transport and store upright
	Fragile Do not throw or drop
	Permitted min. and max. temperature for transport and storage
	Permitted min. and max. humidity for transport and storage
	Packaging can be disposed of via recycling programs

4. MAKING THE DEVICE OPERATIONAL

4.1 Scope of delivery
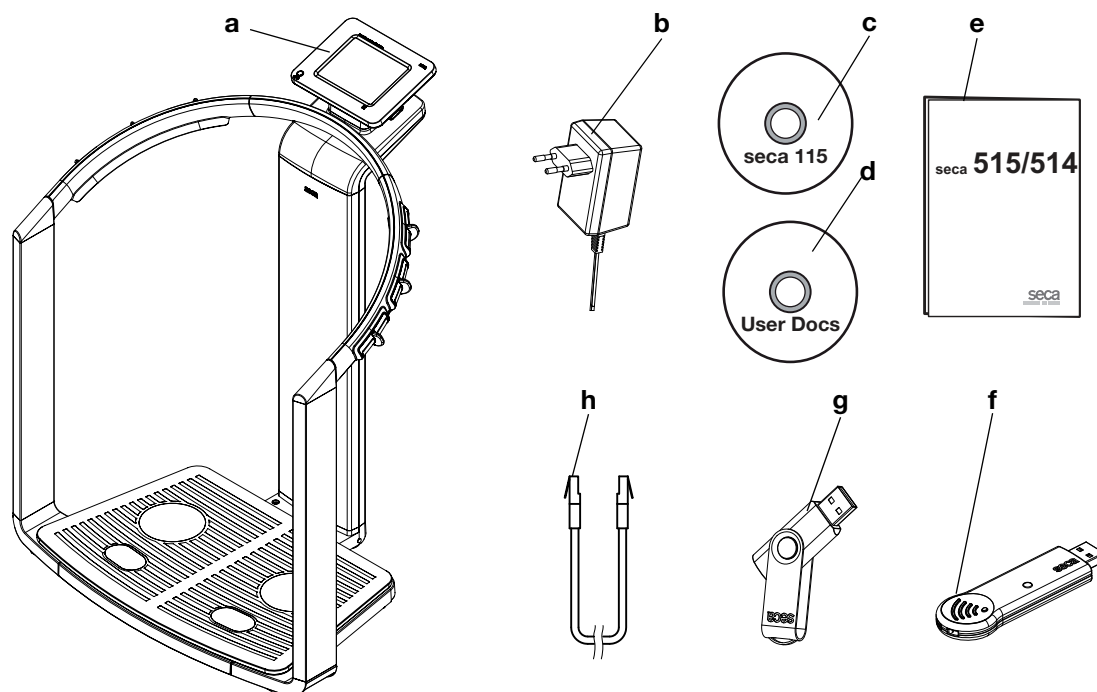
No.	Component	Pcs.
a	medical Body Composition Analyzer	1
b	Power pack	1
c	DVD with **seca 115** PC software and license for a permanent workplace	1
d	DVD with user documentation in PDF format: • Instructions for Use for Physicians and Assistants • Administrator Manual • additional information	1
e	Instructions for Use for Physicians and Assistants, hard copy	1
f	**seca 360° wireless USB adapter 456**	1
g	seca USB memory stick, 2 GB, initialized (USB PIN: 0000)	1
h	Ethernet cable (1.5 m) for connecting to a TCP/IP network	1

4.2 Establishing power supply
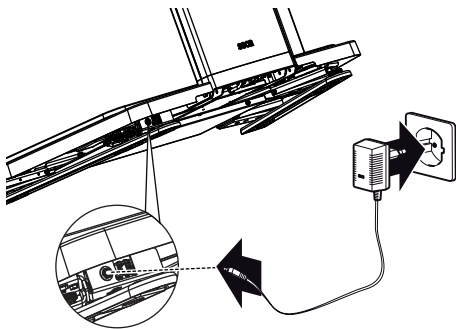
WARNING!
Using the wrong power packs may cause bodily injury or damage to the device
Conventional power packs may deliver a higher voltage than is indicated on them. The device may overheat, catch fire, melt or short-circuit.
► Use only the original seca power pack as contained in the scope of delivery and listed in the section entitled "Spare parts" on page 56.

The connection for the power pack is located on the underside of the weighing platform. To establish the power supply, proceed as outlined below.

1. Insert the plug required for your power supply into the power pack.

2. Tilt the device forward.

3. Insert the device connector of the power pack into the connector socket of the device.

4. Carefully return the device to an upright position.

5. Plug the power pack into a power supply socket.

4.3 Setting up the device

The device is fully assembled upon delivery.

ATTENTION!
Incorrect measurement due to force shunt
If the device and its housing are in contact with something, e.g. due to an uneven or soft floor covering, weight will not be measured correctly.
► Set up the device so that only its foot screws are in contact with the floor.

1. Place the device on a firm, level surface.

ATTENTION!
Incorrect alignment may cause incorrect measurements
The spirit level is very sensitive. Additional weights, such as towels, can result in incorrect scale alignment.
► Align the device only without a load on it.

2. Level the device by turning the foot screws.
   The air bubble in the spirit level must be located in the center of the circle.
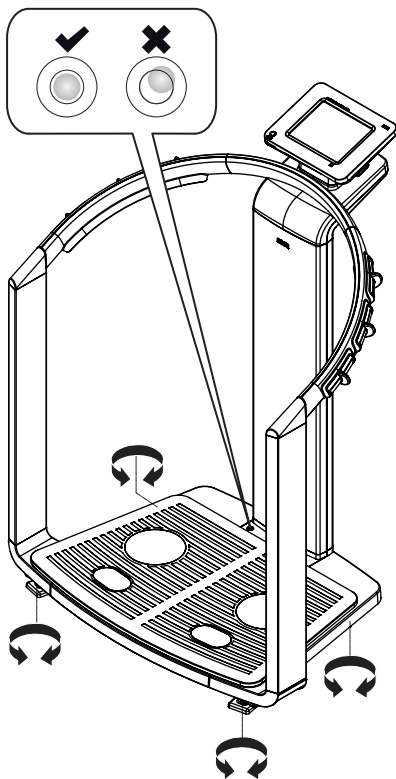
4.4   Operating the device in a PC network

The device does not have "on-board" patient and user administration. If you wish to administer seca patient files and user accounts, the device must be connected to a PC on which the **seca 115** PC software is installed. You have the following connection options:

- network connection via **seca 360°** wireless network or Ethernet
- indirect connection via USB memory stick

The **seca 115** software and the device itself should only be installed and configured by experienced PC administrators or hospital technicians.

> ⚠ **ATTENTION!**
> **Loss of data**
> Incorrect installation or incorrect changes to the installation can lead to loss of data and, as a result, to misdiagnoses.
> ► Make sure the installation or changes to the installation are carried out by an experienced administrator or hospital technician.

Connecting the network via Ethernet or seca 360° wireless network

If the device is to be directly integrated in a PC network, the steps below are necessary.

- Install the **seca 115** PC software on the PC
- Administer the **seca 115** PC software
- Configure the **seca 515/514**
- Set up Ethernet or seca wireless network

Details on the steps mentioned can be found in the section entitled "Configuring the device" from page 28 and in the Administrator Manual for the **seca 115** PC software.
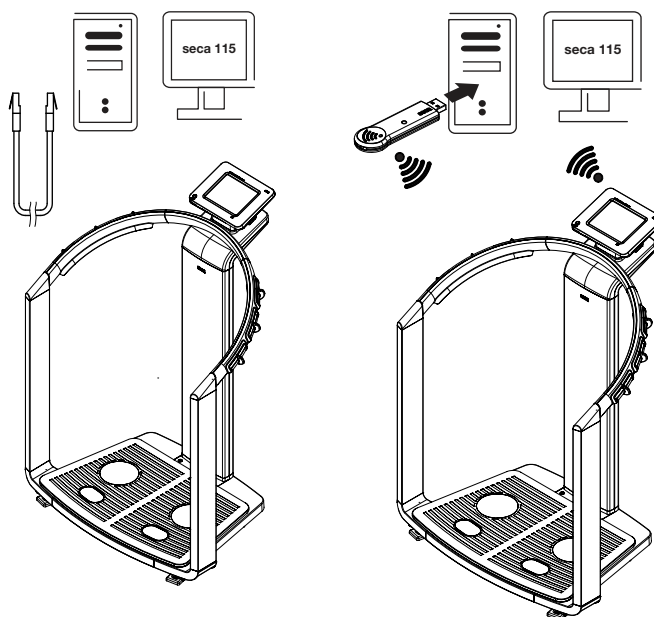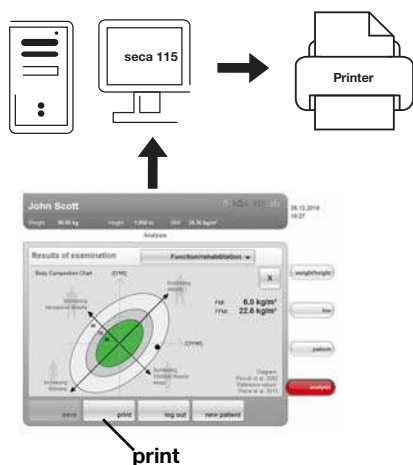
Print

If the device is connected to the **seca 115**PC software via **seca 360°** wireless network or Ethernet, you can use the special print function of the **seca 115** PC software and print out detailed results reports on a PC printer.

The print function is a component of the so-called seca mediator service, a function module of the **seca 115** PC software. The seca mediator service performs the tasks outlined below.

- Calculating bioimpedance analysis from the raw data for impedance of the device
- Graphical processing of the bioimpedance analysis
- Collation and printing of a detailed results report

Printing of a results report can be started directly from the device. The raw data for impedance are sent to the **seca 115** PC software and the seca mediator service starts automatically.

In order to be able to use this function via Ethernet, the device must be incorporated in a seca CLS network. Details on this can be found in the section entitled "Setting up seca CLS network (via Ethernet only)" from page 38 and in the Administrator Manual for the **seca 115** PC software.

Indirect connection via USB memory stick
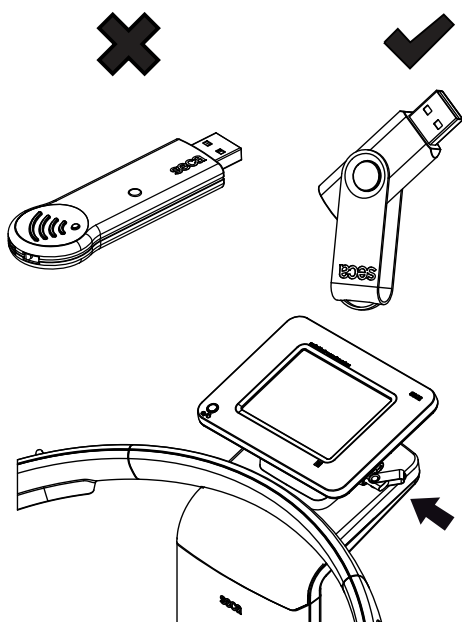
If the device is not to be integrated directly in a PC network, you can create seca patient files and save measurements on the seca USB memory stick supplied.

The seca USB memory stick is supplied initialized, which means that it contains a seca patient database and is secured with an initial USB PIN (0000).

If you wish to use additional USB memory sticks (seca original accessories recommended), these must also be initialized before patient files can be saved on them. Details on this can be found in the Administrator Manual for the **seca 115** PC software.

You can synchronize the seca patient database on the USB memory stick with the seca patient database of the **seca 115** PC software.

The steps below are necessary.

- Install the **seca 115** PC software on the PC
- Administer the **seca 115** PC software
- Configure the **seca 515/514**
- If already available, load seca patient files from the **seca 115** PC software onto the USB memory stick

Details on the steps mentioned can be found in the section entitled "Configuring the device" from page 28 and in the Administrator Manual for the **seca 115** PC software.

4.5   Operation using a seca 360° stadiometer
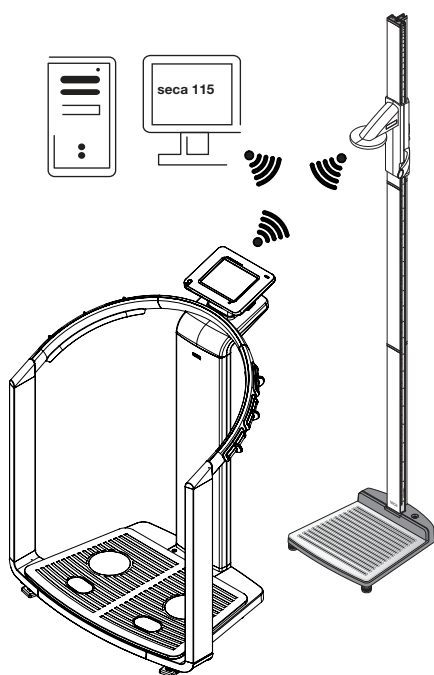
As an alternative to manual entry, you can use a **seca 360°** stadiometer to determine height and transfer the height to the device via **seca 360°** wireless network.

Height is taken into account when analyzing the bioimpedance measurement. If the device is connected to the **seca 115** PC software, height is recorded together with the other measured results in a seca patient file and transmitted to the **seca 115** PC software.

The steps below are necessary.

- Setting up **seca 515/514** and establishing a power supply
- Setting up **seca 360°** stadiometer
- Setting up the **seca 360°** wireless network

Details on the steps mentioned can be found in the section entitled "Configuring the device" from page 28 and in the instructions for use for the **seca 360°** stadiometer and in the Administrator Manual for the **seca 115** PC software.

5. OPERATING CONCEPT

5.1 Swiveling the touchscreen display

max. 180°!

max. 180°!
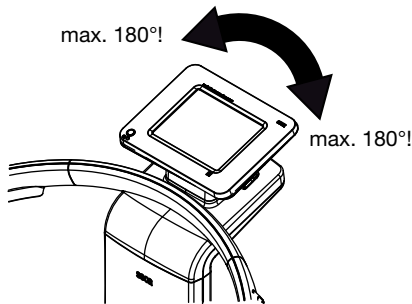
The touchscreen display of the device can be swiveled. As a result, it can be perfectly positioned for every application.

► Swivel the touchscreen display so that is convenient for you to operate and read.

> **ATTENTION!**
> **Damage to device**
> The swivel mechanism of the touchscreen display has an end stop. Do not attempt to swivel the touchscreen display by more than 180°. This will lead to mechanical damage to the housing and the internal cabling.
>
> ► In every direction, only rotate the touchscreen display as far as the end stop.

5.2 Switch on device

The device is switched on using the ON/OFF button. During the switch-on procedure, the device performs a self-test. The self-test may take several seconds.

1. Press the ON/OFF button briefly.
   The LED of the button briefly turns white.
   The internal PC of the device boots up. This takes several seconds.
   The weighing function is available when the LED of the button is permanently white and the **weight/height** tab is shown in the display.

2. Press the **bia** tab in the display.
   The bioimpedance analysis function is available if the **Self-test active** message is no longer displayed and the **Module selection** dialog window appears.
   The device is ready for operation.

5.3 Selecting functions

Functions can be selected using the following elements of the touchscreen display:

- tabs
- buttons
- drop-down menus
- checkboxes

► To select a function, press directly on the corresponding display element (in this case tab, buttons).

5.4   Selecting extended functions

Functions commonly used in a certain context are accessible in the primary menu. Additional functions are accessible in the secondary menu.

> **NOTE:**
> The assignment of functions to the primary and secondary menus is specified at the factory and cannot be changed.

1. Press the **Menu changeover** button.

save	print	log out	settings	

The secondary menu is displayed.

2. Press the **Menu changeover** button again.
   The functions in the primary menu are shown again.

5.5   Entering text

Text is entered via a computer keyboard shown on the touchscreen display.
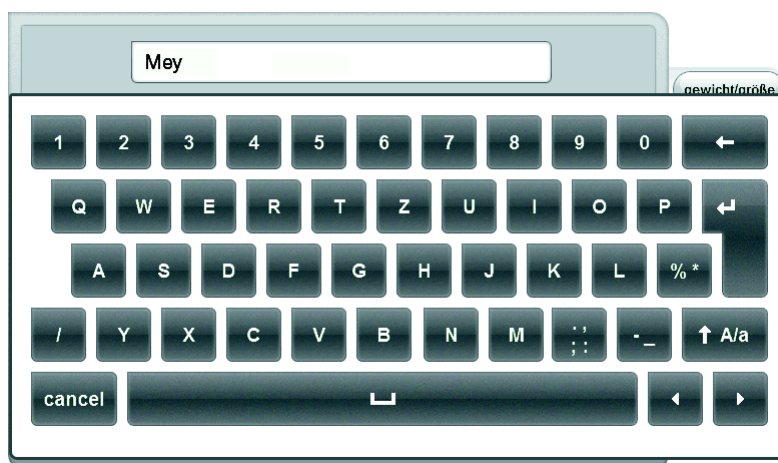
1. Press an input field.
   If the field is intended to have text entered in it, a computer keyboard appears in the display.
2. Type in the desired text.
3. Press the Enter key on the keyboard.
   The entry is accepted.

5.6 Entering numbers

Numbers are entered via a computer numerical keypad shown in the touchscreen display.

1. Press an input field.
   If the field is intended to have numbers entered in it, a numerical keypad appears in the display.
2. Type in the desired number.
3. Press the Enter key on the numerical keypad.
   The entry is accepted.

5.7 Measuring procedure

The operating concept is based on the typical measuring procedure outlined below.
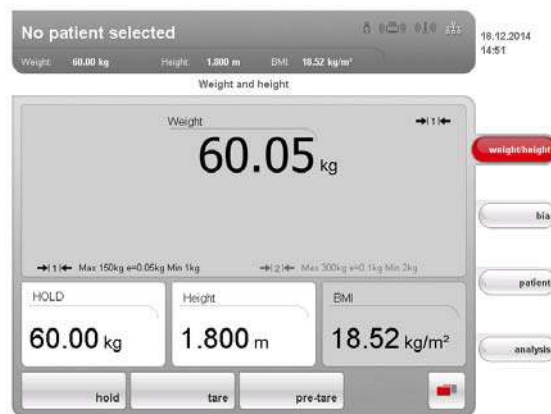
- Measure weight and height
- Perform a bioimpedance measurement
- Assign measurements to a seca patient file
- Evaluate measured results
- Save measuring procedure

The order of the tabs on the touchscreen display follows this sequence. It is possible to operate in a different order.

You can find additional information on the measurement procedure in the Instructions for Use for Physicians and Assistants.

5.8   Automatic standby

The device automatically switches to standby if there are no entries on the device for 5 minutes. This has the following effects:

- measured results and settings which have not been saved are lost.
- the user currently logged in is automatically logged out.
- the LED of the ON/OFF button is green.
- the touchscreen display goes out.

5.9   Switching off the device

⚠ **WARNING!**
Electric shock
The device cannot be de-energized by pressing the ON/OFF button.
▶ Always take out the power supply plug if the device needs to be de-energized - e.g. for a hygiene treatment.

▶ Press the ON/OFF button briefly.
The LED of the button turns green. The touchscreen display goes out. The device is on standby.

▶ Press and hold the ON/OFF button
The LED of the button goes out. The touchscreen display goes out. The device is switched off.

NOTE:
When switching on again from standby, the **weight/height** tab is active immediately. When switching a device which has been switched off back on again, the internal PC boots up again. This takes several seconds.

6. CONFIGURING THE DEVICE

6.1 Adapting the default module selection for bioimpedance analysis

The default module selection determines which evaluation modules are considered during a bioimpedance analysis.

The device is factory-set so that when the **bia** tab is activated, the **Default module selection** dialog window appears and all evaluation modules are activated. This way, the module selection can be verified before each measurement and, if necessary, adapted to suit the individual measurement.

The device can be configured in such a way that the **Default module selection** dialog window does not appear if the **bia** tab is activated. You can also create an in-house default module selection.

Showing/hiding default module selection

In order to determine whether or not the **Default module selection** dialog window is displayed before each bioimpedance analysis, proceed as outlined below.

1. Press the **menu changeover** button.

The secondary menu is displayed.

2. Press the **settings** button.
   The **User** menu appears.

The current setting is displayed (button appears gray = pressed).

3. Press the desired setting.
   – **no**: default module selection is active. It is displayed before every bioimpedance analysis and can be adapted to suit the measurement in question.
   – **yes**: default module selection is active but is not displayed before the bioimpedance analysis. The default module selection can only be adapted in the **settings** menu.

4. Press the **apply** button.
   The module selection is saved and will be available from the next bioimpedance analysis.

Creating default module selection

To create an in-house default module selection, proceed as outlined below.

1. Press the **menu changeover** button.

save	print	log out	settings	

The secondary menu is displayed.

2. Press the **settings** button.
   The **User** menu appears.

3. Press the drop-down menu.
   The drop-down menu opens.

4. Press the **Default module selection** menu element.

The current module selection is displayed.

The **Raw data for impedance** evaluation module is deactivated at the factory. Activation/deactivation of the **Raw data for impedance**, **Energy** and **Health risk** evaluation modules affects the course of the bioimpedance measurement as outlined in the table below.

Evaluation module	Setting • = activated, - = deactivated	Effect[a]
Energy	•	Physical activity level (PAL) is interrogated
	-	No interrogation of physical activity level (PAL)
Health risk	•	Waist circumference (WC) is interrogated
	-	No interrogation of waist circumference (WC)
Raw data for impedance	-	Duration of measurement: max. 17 s
	•	Duration of measurement: max. 75 s Raw data for impedance available for 19 frequencies

a. Interrogation of PAL and WC in the **Module-specific entries** dialog window. Dialog window is skipped if the **Energy** and **Health risk** evaluation modules are deactivated.

5. Press all modules you wish to deactivate.
   The tick in the checkbox is no longer displayed.

   NOTE:
   Press on a module again to reactivate it.

6. Press the **apply** button.

The module selection is saved and will be available from the next bioimpedance analysis.

> **NOTE:**
> To exit the dialog window without saving, press the **cancel** button or the most recently active tab (red, in this case **bia**). The most recently active tab is active again.

6.2 Administering user accounts and access rights

The device has no "on-board" user administration. User accounts can only be set up and edited in the **seca 115** PC software.

When setting up user accounts, different PINs and passwords must be assigned for the usage and administration of the system. The table below provides an overview.

Password/PIN	Use	Source	Change in
User PIN	**seca 515/514**: access to **seca 115** patient database: • Ethernet • seca wireless network • USB memory stick	Automatic assignment by admin when setting up a **seca 115** user account	**seca 115**
USB PIN	**seca 515/514**: access to **seca 115** patient database: • USB memory stick	Initial USB PIN (0000) is supplied with the USB stick	**seca 115**
Admin PIN	**seca 515/514**: device configuration	Initial admin PIN (00000) is supplied with the **seca 515/514**	**seca 515/514**
User password	**seca 115**: administering measurements and patient data	Created by Admin in **seca 115**	**seca 115**
Admin password	**seca 115**: administration of PC software	Initial Admin password is supplied with the **seca 115**	**seca 115**

Additional information on user administration and access rights can be found in the Administrator Manual for the **seca analytics 115** PC software.

6.3 Calling up the Administrator menu

1. Press the **menu changeover** button.

save	print	log out	settings	

The secondary menu is displayed.

2. Press the **settings** button.

apply	cancel	admin	service

The secondary menu **settings** is displayed.

3. Press the **admin** button.
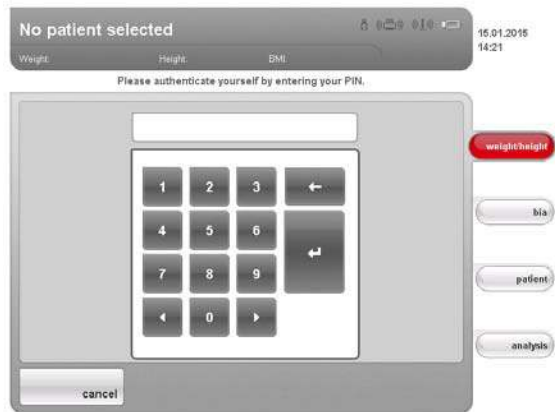
The password request appears.

4. Enter your administrator PIN (factory setting: "00000").

5. Press the Enter key on the numerical keypad.
The entry is accepted.

The **admin** dialog window appears.

6. Press the drop-down menu.

The drop-down menu opens.

7. In the drop-down menu, select the desired menu elements as described in the sections below.

6.4 Making default settings

Setting units of measurement
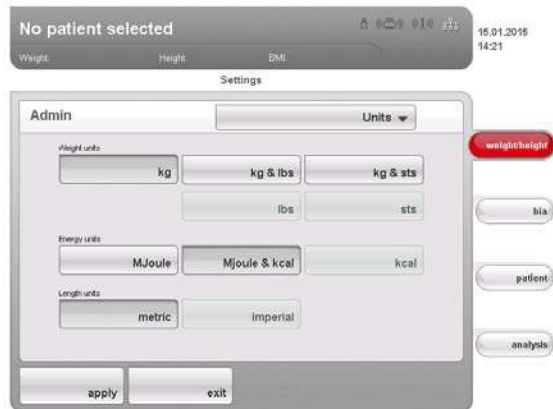
1. Call up the Administrator menu.
   The **Units** dialog window is active.
   The current settings for weight, energy and height are displayed (button gray = pressed).

2. Press the desired settings.

   ⚠ **CAUTION!**
   Hazard to patient
   To prevent misinterpretations, measured results for medical purposes may only be displayed and used in SI units (weight: kilograms, height: meters). Some devices have the option of displaying measured results in different units. This is purely an additional function.
   ► Only use measurements in SI units.
   ► The user takes sole responsibility for the use of measured results in non-SI units.

3. Press the **apply** button.
   The new settings are active.

Making regional settings

1. Call up the Administrator menu.

2. In the drop-down menu, select the **Region** element.

The **Region** dialog window appears.

3. In the **Setup location** drop-down menu, select the country in which you are operating the device.

NOTE:
The selection of the setup location has an impact on which references the device uses to evaluate measured results. For information on the topic of references, see the Instructions for Use for Physicians and Assistants.

4. In the **Dialogue language** drop-down menu, select the desired language.

5. In the **Date format** drop-down menu, select the desired date format.

6. In the **Time format** drop-down menu, select the desired time format.

7. In the **Name format** drop-down menu, select the desired sequence for the patient's name and surname.

Patients' first names and surnames will be displayed in the device's lists and dialog windows in accordance with the sequence you select.

8. In the **Name hyphen** drop-down menu, select the desired hyphenation.

In lists and dialog fields, patients' first names and surnames will be separated by the selected character.

ATTENTION!
Loss of data, incorrect assignment of measurements
The settings for name sequence and name hyphens are not automatically synchronized with the settings in the PC software. If the settings do not match, patients may be confused and measurements assigned to the incorrect seca patient file.
► Ensure that the same settings for name sequence and name hyphen are made both on the device and in the PC software.

9. Press the **apply** button.

10. Switch the device off and back on again.
    The settings are adopted.

Setting the date and time

1. Call up the Administrator menu.

2. In the drop-down menu, select the **Date/time** element.
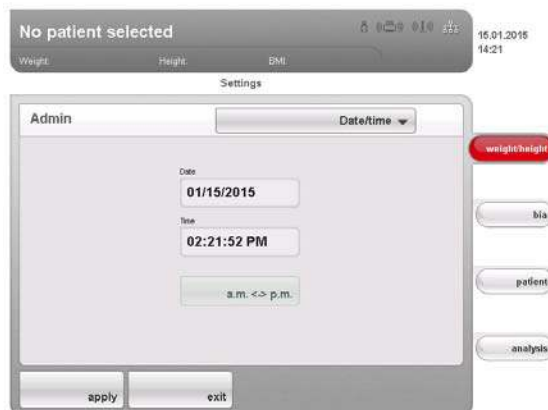
3. Press the field for the value you wish to set:
   – **Date**
   – **Time**
   The numerical keypad appears.

4. Enter the current value.

5. Press the Enter key on the numerical keypad.
   The set value appears in the corresponding field

6. Repeat steps 4. and 5. for every other value you wish to change.

7. If you have selected the time format **12 h** under **Region**, ensure that the
   am / pm setting matches actual time.

   ATTENTION!
   Loss of data, misinterpretation of measurements
   The settings for date and time are not automatically synchronized with
   the settings in the PC software. If the settings do not match, different
   date and time details may lead to measurements being misinter-
   preted.
   ► Ensure that the same settings for date and time are made both on
     the device and in the PC software.

8. Press the **apply** button.

9. Switch the device off and back on again.
   The settings are adopted.

Setting display brightness and volume

1. Call up the Administrator menu.
2. In the drop-down menu, select the **Monitor & sound** element.
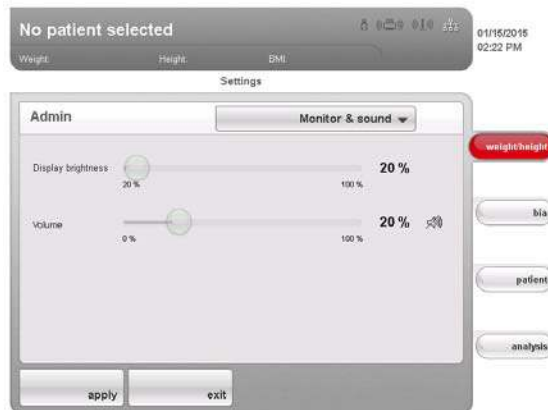
The **Monitor & sound** dialog window appears.

3. Press the slide control of the desired variable and move it to the left or to the right.

Variable	Left	Right
Brightness	Dark (20 %)	Light (100 %)
Volume	Quiet (0 %)	Loud (100 %)

4. Press the **apply** button.
   The new settings are active.

6.5 Setting up the network

Requirements
- **seca 115** PC software installed on a PC
- For Ethernet network: PC with network card and Ethernet interface
- For **seca 360°** wireless network: PC with connected **seca 360° wireless USB adapter 456**

> **NOTE:**
> ▶ To use the network functions, observe the user documentation for the **seca 115** PC software.
> ▶ If a USB memory stick is connected to the device, you can no longer access data of the **seca 115** PC software via Ethernet oder **seca 360°** wireless network.

Network services

The following table shows which network services are installed in combination with the **seca 115** PC software. Depending on the type of network envisaged, the links to these services need to be set up on the device (• = necessary, - = not necessary).

	seca 360° wireless network	Ethernet
Set up wireless network	•	-
Set up Ethernet connection	-	•
Set up link to CLS server and seca mediator service[a]	-	•

a. seca mediator service available for **seca 515/514** from SW version 1.1 and for **seca 115** from SW version 1.4

NOTE:
- ► It is possible to combine network cards. For example, you can link a **seca 360°** stadiometer to the device via **seca 360°** wireless network and link the device itself to a PC on which the **seca 115** PC software is installed via Ethernet.
- ► Details on setting up the individual services can be found on the pages which follow.

Network-dependent functions

The following table shows the functions of the device and of the **seca 115** PC software which require a network connection and states in what kind of network these functions are available (• = available, - = not available):

	seca 360° wireless network	Ethernet
Height transmitted to the device wirelessly	•	-
Start the print function of the **seca 115** PC software directly on the device[a]	-	•
Send individual seca patient file from the **seca 115** PC software to the device	-	•
Search seca patient files from the device in the patient database of the **seca 115** PC software	•	•
Save seca patient files from the device in the patient database of the **seca 115**	•	•

a. Available for **seca 515/514** from SW version 1.1 and for **seca 115** from SW version 1.4

NOTE:
Information about using the network-dependent functions can be found in the "Instructions for Use for Physicians and Assistants" for this device and for the **seca 115** PC software.

Integrate device in an Ethernet network
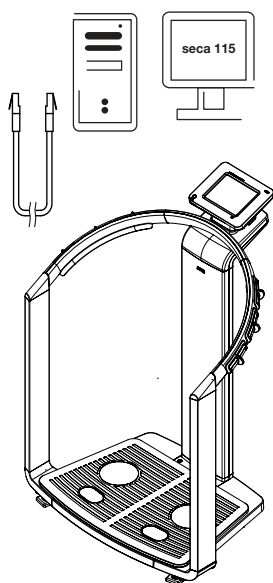
1. Create the hardware link between the device and the network using an Ethernet cable.
2. Call up the administrator menu on the device.
3. In the drop-down menu, select the **Ethernet network** element.

4. In the **DHCP** line, press the setting to suit your network.
   – No DHCP server in the network: **off**, proceed with step 5.
   – DHCP server in the network: **on**, proceed with step 7.
5. Press the **set up** button.

The dialog window for setting up the Ethernet network appears.
6. Make the applicable settings for your network.
7. Press the **save** button.
   The new settings are active.

Setting up seca CLS network (via Ethernet only)

To enable communication between the device and the **seca 115** PC software via Ethernet, you must link the device to the CLS server and the seca mediator service. CLS server and seca mediator service are communication modules of the **seca 115** PC software.

Once the link to the two communication modules has been set up, the following functions can be used directly from the device:

• accessing the seca patient database of the **seca 115** PC software
• printing out a detailed results report directly from the device on a PC printer (the printer is selected in the **seca 115** PC software)

The **seca 115** PC software does not need to be started for this. Only the PC on which the two communication modules and the seca patient database are installed must be switched on.

Network printer

seca 115 client

seca 115 client

seca 115 client (optional)
CLS server

seca mediator service
seca patient database

IP address 192.168.2.12
Port: 60667

seca 115 client
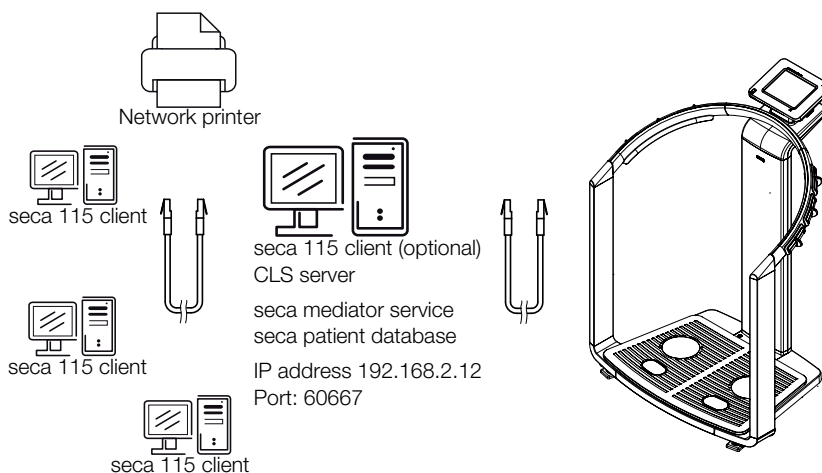
The two communication modules and the seca patient database are installed automatically when you select the options **Server** or **Complete** for installing the **seca 115** PC software.

> **NOTE:**
> Also observe the Administrator Manual for the **seca 115** PC software.

The CLS server and seca mediator service are addressed via the same IP address and the same port. To set up this link, proceed as outlined below.

1. Call up the administrator menu on the device.

2. In the drop-down menu, select the **seca CLS network** element.

The current settings are displayed.

3. In the **IP address** line, enter the appropriate IP address.

Configuration	IP address
seca 115 PC software as a client/ server solution	The IP address of the PC on which the **seca 115** PC software was installed with the options **Server** or **Complete**
seca 115 PC software as a stand-alone solution	IP address of the PC workstation

4. In the **port** line, enter the line "n+100" (n = port for the PC selected under 3., default: 60667).

5. Press the **apply** button.
   The new settings are active.

Setting up the seca 360° wireless network
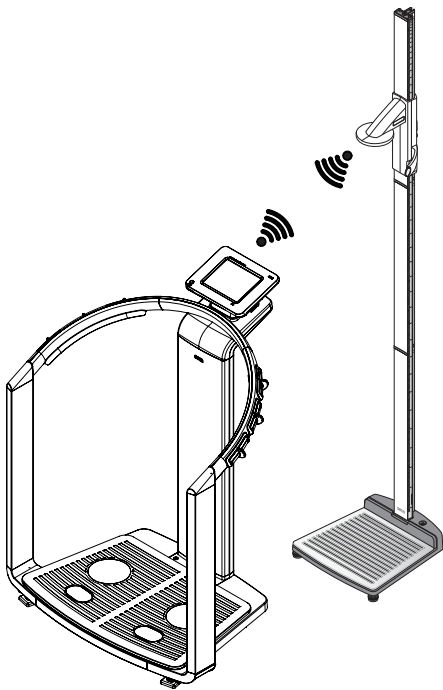
Use the **wireless network** function to link other **seca 360°** devices, e.g. stadiometers, to the **seca 515/514** device wirelessly.

> **NOTE:**
> ► If you wish to link the device to the **seca 115** PC software, set up the seca wireless network from the PC software. Further information can be found in the Administrator Manual for the PC software.
> ► For faster data transmission, we recommend connecting the device via Ethernet to the PC on which the **seca 115** PC software is installed. For information about this, see this document from page 37 and the Administrator Manual for the **seca 115** PC software.
> ► A description of the functional principle of the seca wireless network can be found in the section entitled "Technical information" from page 56.

To set up a **seca 360°** wireless network, proceed as outlined below.

1. Ensure that all devices you wish to connect to the **seca 515/514** device are switched off.
2. Call up the administrator menu on the **seca 515/514** device.
3. In the pull-down menu, select the **wireless network** element.
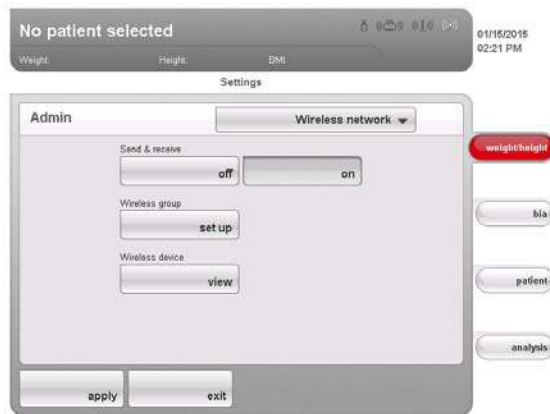
The **wireless network** dialog window appears.

4. In the **send & receive** line, press the **on** button.
5. In the **wireless group** line, press the **set up** button.
6. Press the desired wireless group (in this case wireless group "0").

The program will suggest three channels.

ATTENTION!

Incorrect device assignment and faulty data transfer

You can select channel numbers other than those suggested by the system. This may cause devices to be assigned to incorrect wireless groups, resulting in unreliable data transmission.

► Check that the channel numbers are not being used for the other two wireless groups.

► Make sure that the channel numbers are at least 30 apart from one another.

7. Click on **next**.

The software will wait for signals from other **seca 360°** devices in range.

8. Switch on all devices you wish to incorporate in a wireless group.

When the devices are detected, a beep will be heard.

Detected devices (in this case **seca 360°** stadiometer) will be shown in the touchscreen display. The corresponding symbols in the header appear white.

9. Click on **exit**.
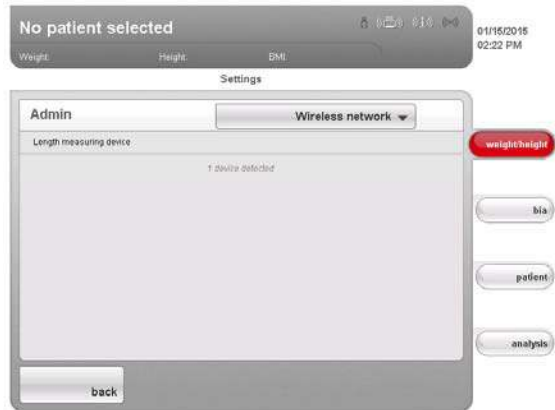
Detected devices are shown on the touchscreen display.

10. Click on **back**.

The **wireless network** dialog window appears.

The seca wireless network for wireless group 0 is set up.

11. Click on **apply**.

The **wireless network** dialog window closes.

Viewing wireless devices   1.   In the **wireless devices** line, press the **View** button.

All detected devices are displayed.

2.   Click on **back**.

The **wireless network** start screen is displayed again.

3.   Click on **apply**.

The **wireless network** dialog window closes.

6.6 System data

Viewing versions

1. Call up the Administrator menu.
2. Press the drop-down menu.
   The drop-down menu opens.
3. Press the **versions** menu element.

The **versions** dialog window appears.

Viewing software versions

The versions of the individual software components active in the device are displayed in the **versions** dialog window.

1. Read off the versions.
2. To exit the **versions** dialog window, click on **exit**.
   The **versions** dialog window closes.

Viewing scale logbook

You can view versions for device software components which are relevant for verification in the **scale log book** line of the **versions** dialog window. The current entry is displayed as soon as the **versions** dialog window opens.

1. Read off the current entry.
2. To view the sequence of versions, press the **history** button.
   – Press once: previous entry is displayed
   – Press several times: all entries are displayed consecutively.
3. Read off the versions.

   NOTE:
   The **history** function is purely for information. It is not possible to reactivate older versions.
4. To exit the **versions** dialog window, click on **exit**.
5. The **versions** dialog window closes.

Entry in "scale log book" line

1. 140301 1.0 14.2 02.01.2005

- Date device was updated
- Software versions of parts of the program which have to be verified
- Software identification
- Serial number
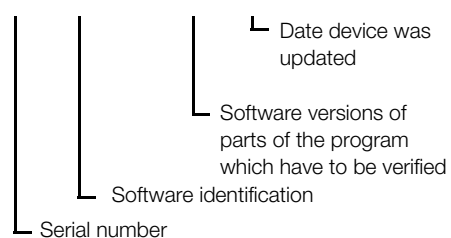
Making system settings

1. Call up the Administrator menu.
2. Press the drop-down menu.
   The drop-down menu opens.
3. Press the **system** menu element.

The **system** dialog window appears.
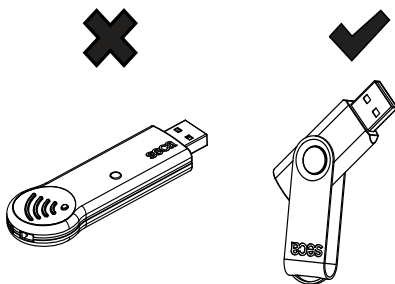
Exporting the system log file

You can export the system log file at regular intervals. To do so, you require a USB memory stick with the following characteristics:

- file system: FAT16
- no old log files on the stick

To export the system log file, proceed as outlined below.

1. Connect the empty USB memory stick to the USB port of the touchscreen display.
2. In the **system** dialog window, press the **Export** button.

3. Wait until the **Export completed** message appears.
4. Analyze and archive the system log file in line with your institution's policy.
5. Delete the system log file from the USB memory stick.
   The memory stick is ready for the next export.

Changing administrator PIN

> **ATTENTION!**
> **Malfunction due to incorrect configuration**
> Every user who knows the administrator PIN can access the administrator menu and administer the system.
> ► Upon initial use, assign a new administrator PIN, in order to prevent access by persons without sufficient expertise.
> ► Only give the new administrator PIN to persons with sufficient expertise in configuring the system.

To change the administrator PIN, proceed as outlined below.

1. Call up the Administrator menu.

2. In the drop-down menu, select the **system** element.

3. In the **system** dialog window, press the **Change** button in the **administrator PIN** line.
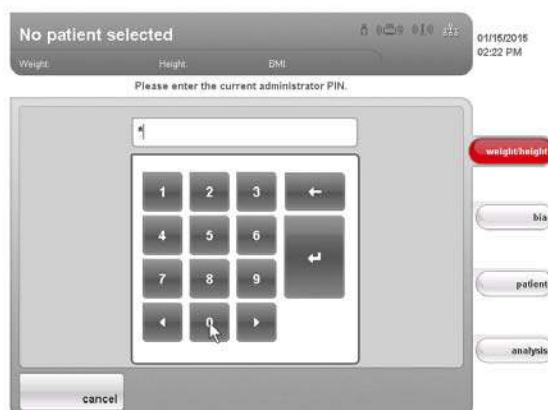
The numerical keypad appears.

4. Enter the previous administrator PIN (factory setting: 00000).

5. Press the Enter key on the numerical keypad.
   The entry is accepted.

6. Enter the new administrator PIN.
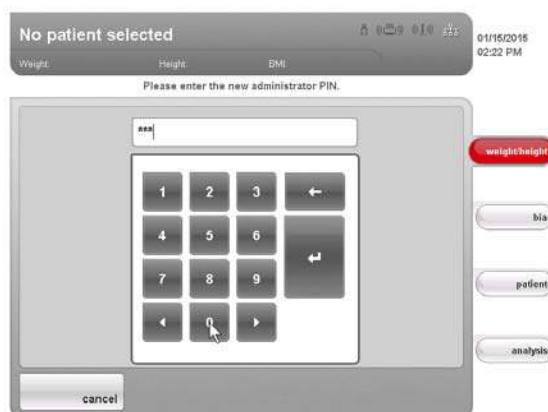
7. Press the Enter key on the numerical keypad.
   The entry is accepted.

8. Enter the new administrator PIN again.

9. Press the Enter key on the numerical keypad.
   The entry is accepted.
   The message **Administrator PIN changed** appears.

10. Switch the device off and back on again.
    The new administrator PIN is active.

Calibrating touchscreen display

If the device has a delayed reaction or does not react at all to the controls in the touchscreen display being pressed, you can calibrate the touchscreen display. To do so, proceed as outlined below.

1. Call up the Administrator menu.

2. In the drop-down menu, select the **system** element.

3. In the **system** dialog window, press the **Calibrate** button in the **touchscreen display** line.

Carefully press and briefly hold stylus on the center of the target.
Repeat as the target moves around the screen.
Press the Esc key to cancel.
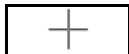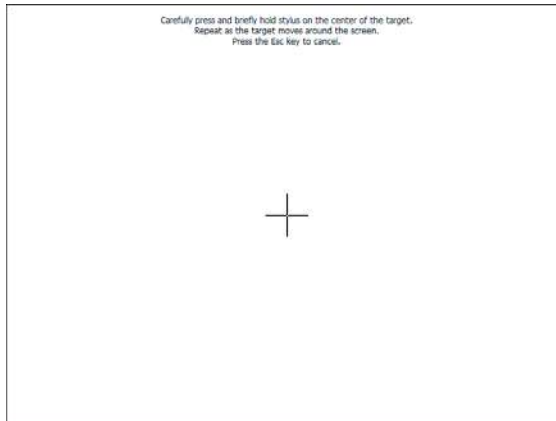
The calibration display appears.

4. Press and hold the cross symbol.
   The cross symbol changes position.

5. Press and hold the cross symbol.
   The cross symbol changes position again

6. Repeat steps 4. and 5. until the cross symbol is no longer displayed.
   The touchscreen display is calibrated.

7. Press the empty touchscreen display.
   The **system** dialog window is shown again.

Restoring factory settings

You can restore the factory settings for the functions below.

Function	Factory setting
Setup location	Others
Language	English
Date format	mm.dd.yyyy
Time format	24 h
Volume	50 %
Pre-tare (Pt)	0 kg
Height	0.0 cm
Brightness of display (back)lighting	100 %
Wireless module	Off
Administrator PIN	00000
CLS server and seca mediator service: • IP address • port	 0.0.0.0 60767
DHCP	yes
Module selection for BIA measurement: • display prior to BIA measurement • active modules	 yes raw data for impedance deactivated

1. Call up the Administrator menu.

2. In the drop-down menu, select the **system** element.

3. In the **system** dialog window, press the **Reset** button in the **admin settings** line.

Factory settings will be restored.

The message **Factory settings successfully restored.** appears.

4. Press the **next** button.

The **system** dialog window is shown again.

Using service functions

The **Service: primary functions** dialog window contains functions your service engineer uses frequently.


The following functions may only be used by your service engineer. The functions are protected by a special access code (SEED).

- Correcting GAL value
- Readjusting the device

The functions below can also be used by you as administrator. To do so, proceed as described on the pages which follow.

- Setting the quality check for the BIA
- Updating device software
- Exporting system settings
- Importing system settings

The functions in this dialog window are included as extras with other service functions in the **service** menu. Contact your service engineer if required.

Updating device software

This function allows you to install a software update on your device. We provide software updates on our website for you to download.

> **NOTE:**
> The firmware of the weight recording module **cannot** be updated using this function.

To install a software update, proceed as outlined below.

1. Load the software update onto a USB memory stick.
2. In the **Service: primary functions** dialog window, press the **update** button.
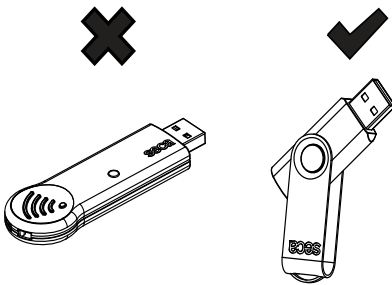
Security information about the software update appears on the screen.

3. Read the security information carefully.

4. Press the **update** button.
   The update process starts.

5. Follow the instructions on screen.
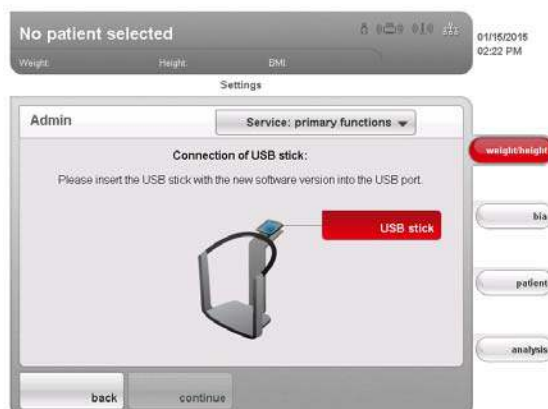
Exporting system settings

You can use this function to export and archive all system settings for the device in order to reload them after a software update, for example, or in order to configure other devices in the same way. To do so, proceed as outlined below.

1. Connect the USB memory stick to the USB port of the touchscreen display.

2. In the **Service: primary functions** dialog window, press the **Export** button.

All system settings are loaded onto the USB memory stick.

3. Archive the system settings in line with your institution's policy.

Importing system settings

You can use this function to reload archived system settings for the device after a software update, for example. If several devices are in operation, you can use this function to ensure that the system settings are identical on all devices. To do so, proceed as outlined below.

1. Load the archived system settings onto a USB memory stick.

2. Connect the USB memory stick to the USB port of the touchscreen display.

3. In the **Service: primary functions** dialog window, press the **import** button.

All system settings are loaded onto the device.

4. Follow the instructions on screen.

6.7   Saving settings

Applying settings

1. Press the **apply** button.
   The **Save successful** dialog window appears.

2. Press the **next** button.
   The administrator menu appears on the display again.
   You can make additional settings in the administrator menu or exit the administrator menu as described in the section entitled "**Exiting the administrator menu**".

Exiting the administrator menu

1. Press the **exit** button.
   The **Unsaved changes** dialog window appears.

2. Press the desired button:
   – **yes**: the changes will be saved. The **settings\User** menu appears in the display again.
   – **no**: the changes will not be saved. The **settings\User** menu appears in the display again.

3. Press the **exit** button.
   The most recently active tab is active again.
   The device is ready to measure.

7. TROUBLESHOOTING

7.1 Power supply and display

Problem	Cause	Remedy
Device cannot be switched on	No power supply	Check whether power is being supplied
	Power pack faulty	Replace power pack with original part
Touchscreen display remains dark	Device on standby	• Touch the touchscreen display • Press the on/off button • Place a load on the device
	Device is not switched on	Switch on device
	No power supply	Check whether power is being supplied
	Touchscreen display faulty	Inform seca service
Touchscreen display not reacting	Device in undefined state following implausible input	• Switch off the device (press and hold the on/off button for approx. 3 seconds) • Switch the device back on
Image on touchscreen display faulty	Touchscreen display faulty	Inform seca service

7.2 Height and weight

Problem	Cause	Remedy
0.00 does not appear before weighing	Device had load on it before it was switched on	• Remove the load from the device • Switch off the device, then switch back on again
The STOP message appears	Maximum load exceeded	Remove the load from the device
TEMP message appears	Ambient temperature too high or too low	• Set up the device in an ambient temperature between +10 °C and +40 °C • Wait for around 15 minutes until the device has adapted to the ambient temperature
The message ER11 appears	Device overloaded as a whole or in one corner	• Remove the load or distribute the load evenly • Restart the device
The message ER12 appears	Device switched on with too heavy a load	• Remove the load from the device • Restart the device
The message ER16 appears	Natural vibration has been induced in device, zero point could not be determined	• Restart the device • Restart measurement

7.3 Bioimpedance analysis

Problem	Cause	Remedy
bia tab activated, but module selection does not appear	Module selection deactivated	Check setting and change if necessary (see "Adapting the default module selection for bioimpedance analysis" on page 28)
Not all modules activated in module selection	Default module selection specified in which some modules have been deactivated	• Activate missing modules directly in the module selection and perform the measurement • Adapt default module selection (see "Creating default module selection" on page 29)
The following message appears: "Electrode detection failed."	Patient's skin too dry	Spray the skin at the contact points with electrode spray
	Patient's skin too calloused	Spray the skin at the contact points with electrode spray
	Electrodes faulty	Inform seca service
No PAL value can be entered following bioimpedance measurement	**Energy** evaluation module deactivated	• If the **Energy** evaluation module is not required, continue and complete measurement • If the **Energy** evaluation module is required, activate the evaluation module (see "Creating default module selection" on page 29)
No waist circumference can be entered following bioimpedance measurement	**Health risk** evaluation module deactivated	• If the **Health risk** evaluation module is not required, continue and complete measurement • If the **Health risk** evaluation module is required, activate the evaluation module (see "Creating default module selection" on page 29)
Results of bioimpedance measurement deviate significantly from expected results	Patient moved during the measurement	Request the patient not to move during the measurement and repeat the measurement
	Patient used different pairs of hand electrodes on the left and right	Ensure that the patient uses the same hand electrodes on both sides and repeat the measurement
	Electrodes faulty	Inform seca service
Value of an evaluation parameter is shown in red	Value outside the normal range determined for the evaluation parameter	• Repeat the measurement to rule out measurement errors • If the repeat measurement also produces a value outside the normal range, take the value into account in further investigations
After a different tab has been called up temporarily, the assigned seca **patient file is no longer shown in the patient tab**	seca patient file assigned, but assignment not confirmed	Assign seca patient file again and press the **confirm** button (see Instructions for Use for Physicians and Assistants); only call up another tab after that

7.4   Data transmission

Problem	Cause	Remedy
Data transmission cannot be set up between device and seca 115	Software versions incompatible	Administrator: use compatible software version: • device min. software version 1.1 • PC software min. software version 1.4
A seca **patient file is displayed as "not assigned" in the seca 115 PC software following import from a USB memory stick**	For access to the seca patient database of the USB memory stick, use the USB PIN for the USB memory stick rather than the user PIN	Manually assign the measurement/seca patient file to an attending physician in the **seca 115**
seca **patient file cannot be found when searching for a patient on the device**	No seca patient file set up yet	Create seca patient file (see Instructions for Use for Physicians and Assistants)
	seca patient file is not yet assigned to you in the **seca 115**	Check whether or not the seca patient file can be assigned to you in the **seca 115**
	Windows firewall port blocking is active, ports used for communicating with the device blocked	Administrator: free the port used for communication with the device in Windows firewall
	No seca CLS network set up	Administrator: set up seca CLS network (see "Setting up seca CLS network (via Ethernet only)" on page 38)
	seca CLS server of the **seca 115** PC software not started	Administrator: start seca CLS server manually
Patient name cannot be entered in the set language	No keypad available for set language.	• Provide seca patient file from the PC software (see Instructions for Use for Physicians and Assistants) • Administrator: check whether the settings for region and language are correct
seca **patient file cannot be provided by the PC software**	Function not available via **seca 360°** wireless network, no network connection via Ethernet set up	Administrator: set up Ethernet connection
	No seca CLS network set up	Administrator: set up seca CLS network (see "Setting up seca CLS network (via Ethernet only)" on page 38)
	seca CLS server of the **seca 115** PC software not started	Administrator: start seca CLS server manually
	Software version not current	Administrator: use current software version: • device min. software version 1.1 • PC software min. software version 1.4

Problem	Cause	Remedy
No access to seca **patient database of the seca 115 PC software**	No **seca 360°** wireless network set up between device and the PC on which the **seca 115** PC software is installed	Administrator: set up **seca 360°** wireless network (see "Setting up the seca 360° wireless network" on page 40)
	No Ethernet connection set up between the device and the PC on which the **seca 115** PC software is installed	Administrator: set up Ethernet connection (see "Integrate device in an Ethernet network" on page 37)
	Device connected to a standalone PC via Ethernet cable. The PC's network card does not permit automatic crossover	Administrator: use a crossover adapter (see "Technical information" on page 56)
	No USB memory stick connected to the touchscreen display.	Connect USB memory stick to the touchscreen display
	The PC on which the **seca 115** PC software is installed is not switched on	Switch on the PC and start the **seca 115** PC software
	seca 115 PC software not started	Start the **seca 115** PC software
	No seca CLS network set up	Administrator: set up seca CLS network (see "Setting up seca CLS network (via Ethernet only)" on page 38)
	seca CLS server of the **seca 115** PC software not started	Administrator: start seca CLS server manually
USB memory stick connected to touchscreen display but no access to the seca **patient database**	Non-initialized USB memory stick being used	• Use the USB memory stick supplied • Administrator: initialize USB memory stick using the **seca 115** PC software
	PIN not entered or entered incorrectly	Use your user PIN or the PIN for the USB memory stick.
	Unsuitable USB memory stick being used	• Use the USB memory stick supplied • Use a FAT16 USB memory stick
	Interference from high-frequency emissions from other devices (e.g. cellphones)	Increase distance from high-frequency devices

7.5 Print

Problem	Cause	Remedy
Print function not available	Software versions incompatible	Administrator: use compatible software version: • device min. software version 1.1 • PC software min. software version 1.4
	No network connection set up between device and **seca 115** PC software	• Set up **seca 360°** wireless network ("Setting up the seca 360° wireless network" from page 40) • Set up Ethernet connection ("Integrate device in an Ethernet network" from page 37)
	No seca CLS network set up	Administrator: set up seca CLS network (see "Setting up seca CLS network (via Ethernet only)" on page 38)
	A **seca 115** PC software service (mediator service, calculation service, image service, print service) has not started	Administrator: start **seca 115** PC software service manually
Results report not being printed	PC printer not switched on	Switch on PC printer
	The PC on which the **seca 115** PC software is installed has not been switched on	Switch on PC
	No link set up between the **seca 115** PC software and the PC printer	Set up link between **seca 115** PC software and the PC printer
No personal data in results report	In the case of repeat measurement: no seca patient file assigned	Call up the **patient** tab and assign seca patient file (see Instructions for Use for Physicians and Assistants)
	On initial measurement: seca patient file not created yet	Call up the **patient** tab and create seca patient file (see Instructions for Use for Physicians and Assistants)
No bioimpedance parameters in results report	No bioimpedance measurement performed	Call up the **bia** tab and perform the measurement (see Instructions for Use for Physicians and Assistants)
No height in results report	No height entered on device	Call up the **weight/height** tab and enter height (see Instructions for Use for Physicians and Assistants)
	No height transmitted by the **seca 360°** stadiometer	Measure the patient's height again and press the **send/print** button (see Instructions for Use for Physicians and Assistants)

8. OPTIONAL ACCESSORIES

Accessory	Article number
Measuring stations • **seca 285** • **seca 284** Length measuring rods • **seca 274** • **seca 264**	 Country-specific versions Country-specific versions Country-specific versions Country-specific versions
seca analytics 115 PC software	Application-specific license packages
seca 360° wireless USB adapter 456 USB wireless adapter	456-00-00-009
Crossover adapter for Ethernet cable	08-06-16-469-119

9. SPARE PARTS

Spare part	Article number
Power pack: 100-240 V~ / 50-60 Hz / 12 V= / 1.2 A	68-32-10-268
seca 201 circumference tape measure	201-17-17-009
DVD with **seca analytics 115** PC software and license for a permanent workplace	Country-specific versions
seca 360° wireless USB adapter 456	456-00-00-009
Ethernet cable (1.5 m)	08-06-16-467

10. TECHNICAL INFORMATION

10.1 The seca 360° wireless network

seca 360° wireless	
Maximum number of wireless groups per PC workstation and USB adapter	3
Maximum configuration per wireless group	1 baby scale 1 personal scale 1 length measuring device 1 medical Body Composition Analyzer (mBCA) 1 seca wireless printer (not recommended for operation with the mBCA) 1 PC with seca USB wireless adapter and **seca 115** software
Number of channels per wireless group	3
Type of channel assignment	Automatic (recommended) Manual
Channel numbers	0 - 99
Minimum spacing of channel numbers	30
• Frequency band • Transmission power • Maximum range	2.433 GHz - 2.480 GHz < 10 mW 10 m

10.2 Technical modifications

Combination of seca 515/514 (SW version 1.1 from Build 550) and seca 115 (SW version 1.4 from Build 560)	
Downward-compatible	No
New	Save or discard measured results after quality check
Modified	• Graphical representation: Body composition chart (BCC), fat-free mass (FFM), fat mass (FM), body mass index - WHO reference value for adults (BMI) • hydration (HYD) parameter in the **Fluid** evaluation module

Combination of seca 515/514 (SW version 1.1) and seca 115 (SW version 1.4)	
Downward-compatible	No
New	• Regional settings: **Name format**, **Name hyphen** drop-down menus • Enter waist circumference when **Health risk** evaluation module activated • Visceral adipose tissue (VAT) parameter in the **Health risk** evaluation module • Skeletal muscle mass (SMM) parameter in the **Function/rehabilitation** evaluation module • Send individual seca patient file from the **seca 115** PC software to the mBCA • Start printing results reports directly on the device (**seca 515/514**)
Modified	Graphical representation: phase angle (φ), bioimpedance vector analysis (BIVA), body composition chart (BCC), total body water (TBW)
No longer applicable	Lean soft tissue (LST) parameter in **Function/rehabilitation** evaluation module

10.3 Additional technical information

Additional technical information can be found in the " Instructions for Use for Physicians and Assistants":

- Hygiene treatment
- Maintenance/reverification
- Technical data

11. DISPOSAL

Do not dispose of the device with your household waste. It has to be properly disposed of as electronic waste. Follow your respective national regulations. For more information, please contact our service representatives at:

service@seca.com

12. WARRANTY

There is a two-year warranty period from delivery for defects attributable to poor materials or workmanship. All movable parts, including batteries, cables, power packs, rechargeable batteries etc. are exempt. Defects which come under the warranty will be repaired for the customer free of charge against proof of purchase. Additional claims cannot be considered. Costs of transport to and from seca are the responsibility of the customer if the device is located somewhere other than the customer's headquarters. In the event of transport damage, warranty claims can only be made if the complete original packaging was used for transport and the device was secured and fastened therein according to its originally-packed condition. You should therefore keep all packaging parts.

The warranty will be voided if the device is opened by persons not expressly authorized by seca to do so.

We ask customers overseas to contact the seller in their respective country directly in the event of warranty claims.

13. DECLARATION OF CONFORMITY

seca gmbh & co. kg hereby declares that the product meets the terms of the applicable European directives. The unabridged declaration of conformity can be found at: www.seca.com.

Medical Measuring Systems and Scales since 1840

seca gmbh & co. kg

Hammer Steindamm 3 – 25

22089 Hamburg · Germany

Telephone +49 40 20 00 00 0

Fax +49 40 20 00 00 50

info@seca.com

seca operates worldwide with headquarters
in Germany and branches in:

seca france

seca united kingdom

seca north america

seca schweiz

seca zhong guo

seca nihon

seca mexico

seca austria

seca polska

seca middle east

seca brasil

seca suomi

seca américa latina

and with exclusive partners in
more than 110 countries.

All contact data under www.**seca**.com

seca®
Precision for health