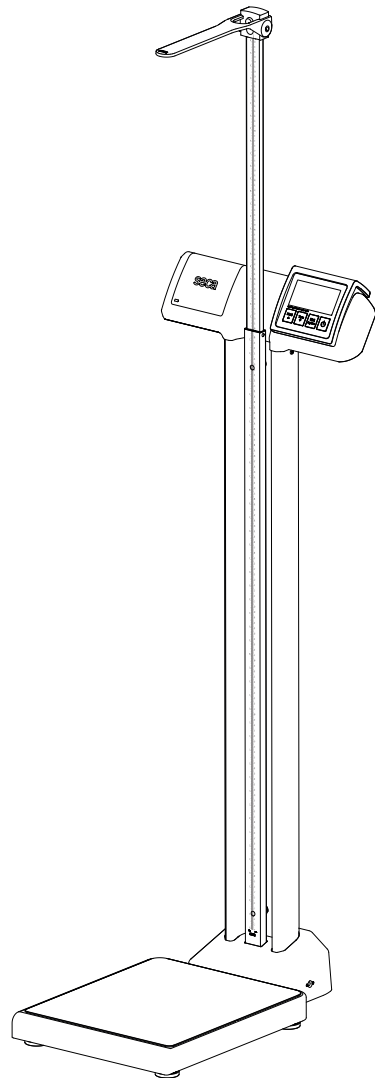


# seca 777



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# 1. DESCRIPTION OF DEVICE

## 1.1 Intended use

---

The **seca 777** measuring station is used in accordance with national regulations primarily in hospitals, medical practices and in-patient care facilities.

The **seca 777** measuring station is for conventional determination of weight and height and for determining the general state of nutrition; it supports the attending physician in making a diagnosis or deciding on a course of treatment.

To make an accurate diagnosis, however, the physician needs to commission other specific examinations and take their results into account, in addition to determining weight and height.

## 1.2 Description of function

---

**Measuring station** On the **seca 777** measuring station, weight is recorded by four load cells. Height is recorded with the integrated measuring rod.  
Body mass index (BMI) can be calculated automatically from the measuring results.

**USB interface** The USB interface allows the **seca 777** measuring station to be connected to a PC by means of a suitable USB cable (USB 2.0, mini USB type B, max. cable length: 1.80 m). This makes it possible to process the weight values displayed using the customer's own software solution.

## 1.3 User qualification

---


**Assembly** Devices that are shipped partially assembled may only be mounted by sufficiently qualified persons such as specialist dealers, hospital technicians or seca Service technicians.


**Operation** The device may only be operated by healthcare professionals.


# 2. SAFETY INFORMATION

## 2.1 Safety precautions in these instructions for use

---

 **DANGER!** Used to identify an extremely hazardous situation. If you fail to take note of this information, serious irreversible or fatal injuries will occur.

 **WARNING!** Used to identify an extremely hazardous situation. If you fail to take note of this information, serious irreversible or fatal injuries may result.

 **CAUTION!** Used to identify a hazardous situation. If you fail to take note of this information, minor to moderate injuries may result.

**NOTICE!**

Used to identify possible incorrect usage of the device. If you fail to take note of this information, you may damage the device, or the measured results may be incorrect.

**NOTE**

Includes additional information about use of the device.

## 2.2 Basic safety precautions

---

### Handling the device

- ▶ Please take note of the information 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/air mixtures



**CAUTION!**  
**Patient hazard, damage to device**

- ▶ Additional devices which are connected to electrical medical 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 electrical medical devices is considered a system configurer and is therefore responsible for ensuring that the system complies with the requirements of standards for systems. This also applies to additional devices recommended by seca. 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.
- ▶ Have servicing carried out regularly as described in the relevant section of this document.
- ▶ Technical modifications may not be made to the device. The device does not contain any parts for servicing by the user. Only have servicing and repairs performed by an authorized seca Service partner. You can find service partners in your area at [www.seca.com](http://www.seca.com) or by sending an e-mail to [service@seca.com](mailto:service@seca.com).
- ▶ Only use original seca accessories and spare parts, otherwise seca will not grant any warranty.



**CAUTION!**  
**Patient hazard, malfunction**

- ▶ Keep other electrical medical devices, e.g. high-frequency surgical devices, a minimum distance of approx. 1 meter away to prevent incorrect measurements or wireless transmission interference.
- ▶ Keep HF devices such as cell phones a minimum distance of approx. 1 meter away to prevent incorrect measurements or wireless transmission interference.
- ▶ The actual transmission output of HF equipment may require minimum distances of more than 1 meter. Details can be found at [www.seca.com](http://www.seca.com).

## Preventing electric shock



### **WARNING!** **Electric shock**

- ▶ Set up the device so that the power supply socket is easy to reach and the device can be disconnected from the power supply quickly.
- ▶ Ensure that your local power supply matches the information on the power supply unit.
- ▶ Do not touch the power supply unit with wet hands.
- ▶ Do not use extension cables or power strips.
- ▶ Make sure that cables are not pinched or damaged by sharp edges.
- ▶ Make sure that cables do not come into contact with hot objects.
- ▶ Do not operate the device at an altitude of more than 3000 m above sea level.

## Preventing injuries and infections



### **WARNING!** **Injury from falls**

- ▶ Ensure that the device is positioned firmly and level.
- ▶ Route connecting cables (if present) in such a way that neither user nor patient can trip over them.
- ▶ The device is not designed as a standing aid. Assist people with limited motor skills when they are getting up, e.g. from a wheelchair.
- ▶ Make sure that the patient does not step onto and off the weighing platform right at the edges.
- ▶ Make sure that the patient steps onto and off the weighing platform slowly and safely.



### **WARNING!** **Danger of slipping**

- ▶ Ensure that the weighing platform is dry before the patient steps onto it.
- ▶ Ensure that the patients feet are dry before he or she steps onto the weighing platform.
- ▶ Make sure that the patient steps onto and off the weighing platform slowly and safely.



### **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 damage to device

### NOTICE!

#### Damage to device

- ▶ Ensure that no liquids enter the device. They can damage the electronics.
- ▶ Switch off the device before disconnecting the power supply unit from the mains socket.
- ▶ For devices with power supply operation: Disconnect the power supply unit from the mains socket if you intend to not use the device for a longer period of time. Only this way it can be ensured that the device is de-energized.
- ▶ For devices with battery or rechargeable battery operation: If you do not use the device for an extended period of time, remove batteries or rechargeable batteries. Only this way it can be ensured that the device is de-energized.
- ▶ Make sure not to drop the device.
- ▶ Do not expose the device to any impacts or vibrations.
- ▶ Perform function controls regularly as described in the relevant section in this document. Do not operate the device if it is damaged or not working properly.
- ▶ Ensure that there is no heat source in the immediate vicinity. Do not expose to direct sunlight. The excessive temperature could damage the electronics.
- ▶ Avoid rapid temperature fluctuations. When the device is transported so that a temperature difference of more than 20 °C occurs, it must stay turned off for at least 2 hours before it can be turned on again. Otherwise, condensation water will form which can damage the electronics.
- ▶ Use the device only in the intended ambient conditions.
- ▶ Store the device only in the intended storage conditions.
- ▶ Do not use aggressive or abrasive cleaning agents.
- ▶ Do not use organic solvents (e.g. white spirit or petroleum spirit).

## Handling measuring results



### CAUTION!

#### Patient hazard

In order to avoid misinterpretations, measuring results for medical use must be displayed and used in SI units (weight: kilogrammes, length: metres) only. Some devices offer the ability to display measuring results in other units. This is only an additional function.

- ▶ Use the results exclusively in SI units.
- ▶ The use of measurement results in non-SI units is the sole responsibility of the user.

### NOTICE!

#### Inconsistent measuring results

- ▶ Before you electronically save measurement values determined using this device and use them further (e.g. in seca PC software or in an EMR system), make sure that the measurement values are plausible.
- ▶ If measurement values are transmitted to seca PC software or an EMR system, make sure prior to further use that the measurement values are plausible and are assigned to the correct patient.

## Handling packaging material



### **WARNING!**

#### **Risk of suffocation**

Packaging material made of plastic foil (bags) is a choking hazard.

- ▶ Keep packaging material out of reach of children.
- ▶ In the event that the original packing material may not be available anymore, only use plastic bags with security holes in order to reduce the risk of suffocation. Use recyclable materials if possible.

### **NOTE**

Keep the original packing material for future use (e.g. returning for servicing).

## Handling batteries and rechargeable batteries



### **WARNING!**

#### **Personal injury as a result of improper handling**

Batteries and rechargeable batteries contain harmful substances which may explode if not handled properly.

- ▶ Do not try to recharge batteries.
- ▶ Do not expose (rechargeable) batteries to heat.
- ▶ Do not burn (rechargeable) batteries.
- ▶ If acid is leaking out, avoid contact with the skin, eyes and mucous membranes. Rinse affected areas with plenty of clean water and seek medical help at once.

### **NOTICE!**

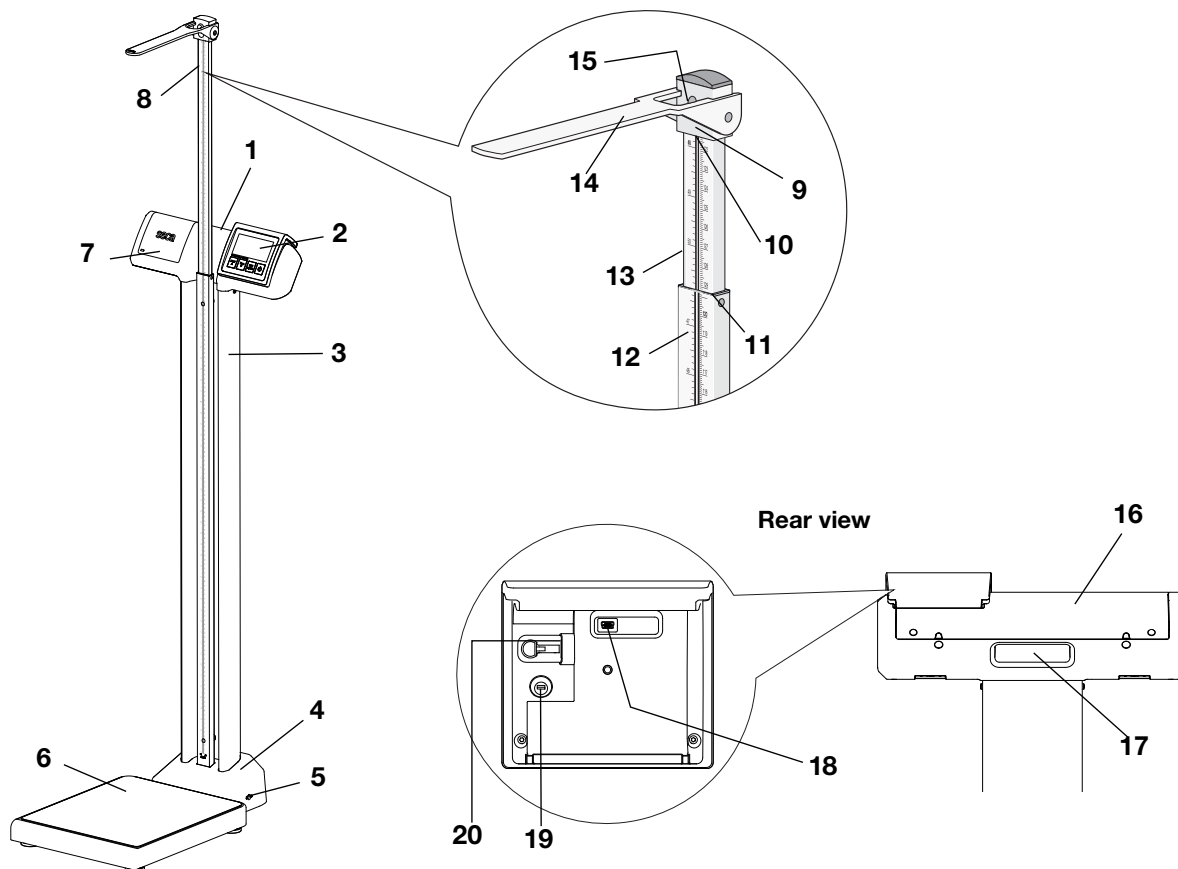
#### **Damage to device and malfunctions with improper handling**

- ▶ Only use the type of (rechargeable) battery specified in this document.
- ▶ When replacing (rechargeable) batteries, always replace a complete set at a time.
- ▶ Do not short-circuit (rechargeable) batteries.
- ▶ If you do not use the device for a long period of time, remove the batteries (incl. rechargeable batteries). This prevents acid from leaking into the device.
- ▶ If acid leaked into the device, discontinue use. Have the device checked by an authorised seca Service partner and repaired if necessary.



### 3. OVERVIEW

#### 3.1 View of device

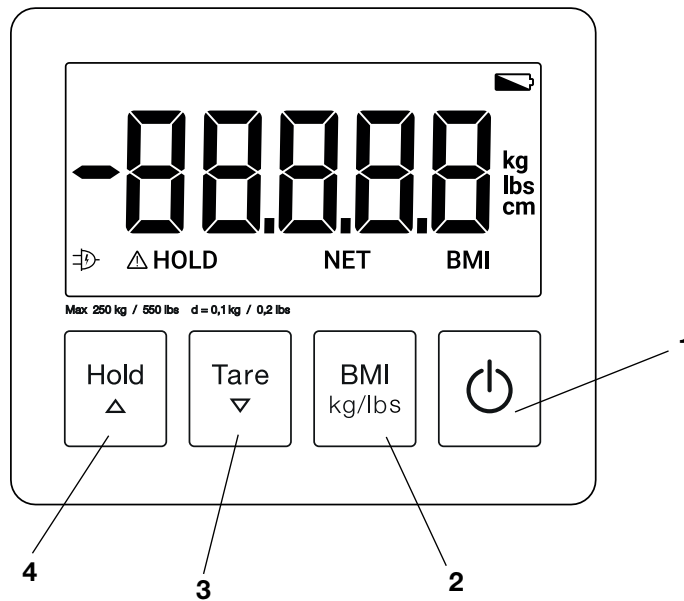



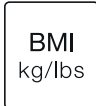

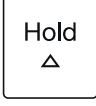
Item	Device component	Function
1	Display head	For supporting the display unit and housing the cables and batteries
2	Display unit	Serves as the central operating and display element
3	Column	For supporting the display head and the measuring rod
4	Column holder	For supporting the column
5	Power supply connection socket	For connecting a seca plug-in power supply unit
6	Weighing platform	For weighing patients
7	Battery compartment	To take type AA batteries, 1.5 V
8	Measuring rod	For measuring height
9	Head slide	For sliding the measuring flap onto the lower telescopic element
10	Read-off edge 1	For reading off measuring results in measuring range 1
11	Read-off edge 2	For reading off measuring results in measuring range 2
12	Lower telescopic element	For measuring height in measuring range 1: up to 1.22 m
13	Upper telescopic element	For measuring height in measuring range 2: from 1.22 m
14	Measuring flap	Serves as a head stop for measuring height
15	Latch	For releasing and latching the head slide

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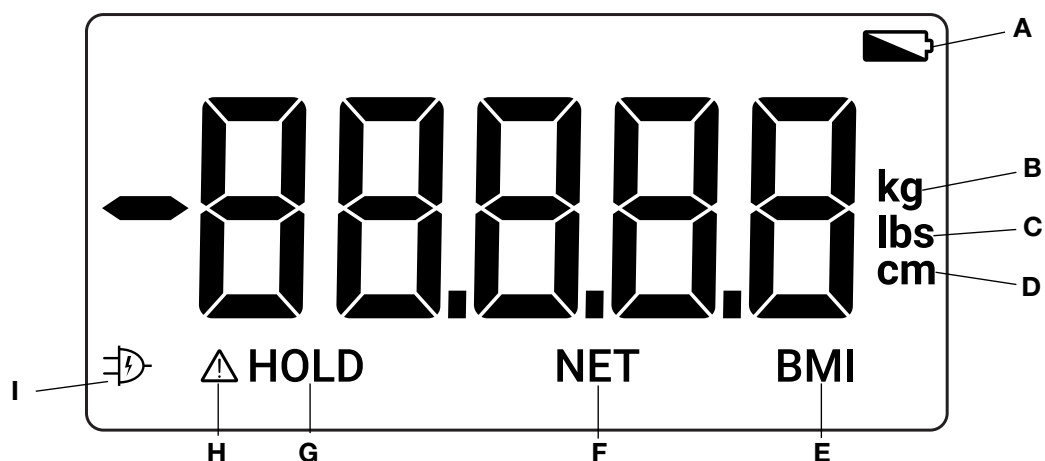
Item	Device component	Function
16	Cover panel	For covering the cables
17	Recessed handle	For transporting the measuring station
18	USB interface	For transmitting the weight values displayed to the customer's own software solution (if you have any questions, contact seca Service)
19	Battery cable socket	For connecting the battery cable
20	Connecting cable socket	For connecting the connecting cable

### 3.2 Display unit controls



Item	Control	Function
1		On/off key - Switch the device on and off
2		<b>BMI kg/lbs</b> key <ul style="list-style-type: none"> <li>• During the measuring process: <ul style="list-style-type: none"> <li>- Activate BMI mode (press key briefly)</li> <li>- Switch between the units kilograms and pounds (press and hold key) (function depends on variant)</li> </ul> </li> <li>• In BMI mode: <ul style="list-style-type: none"> <li>- Confirm height value and display BMI (press key briefly)</li> <li>- Exit BMI mode (press key briefly again)</li> </ul> </li> </ul>
3		<b>Tare</b> ▽ key <ul style="list-style-type: none"> <li>• During the measuring process: <ul style="list-style-type: none"> <li>- Activate/deactivate <b>Tare</b> function</li> </ul> </li> <li>• In BMI mode: <ul style="list-style-type: none"> <li>- Reduce height value</li> </ul> </li> </ul>
4		<b>Hold</b> △ key <ul style="list-style-type: none"> <li>• During the measuring process: <ul style="list-style-type: none"> <li>- Activate/deactivate <b>Hold</b> function</li> </ul> </li> <li>• In BMI mode: <ul style="list-style-type: none"> <li>- Increase height value</li> </ul> </li> </ul>



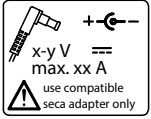



### 3.3 Symbols in the display










Item	Symbol	Meaning
A		Batteries are low
B	kg	Weight value in kilograms
C	lbs	Weight value in pounds
D	cm	Height in centimeters
E	BMI	Body mass index
F	NET	Additional weight tared off ( <b>Tare</b> )
G	HOLD	The weight value is displayed permanently ( <b>Hold</b> )
H		Non-verifiable function active
I		Operation with power supply unit

### 3.4 Markings on the device and on the type plate

Text/symbol	Meaning
	Name and address of manufacturer, date of manufacture
REF	Model number
SN	Serial number, consecutive
ProdID	Product identification number, consecutive
Approval Type	Type designation of design approval
	Follow instructions for use
	Medical electrical device, Type B
d	Value in mass units (non-verified models) States the difference between two consecutive display values

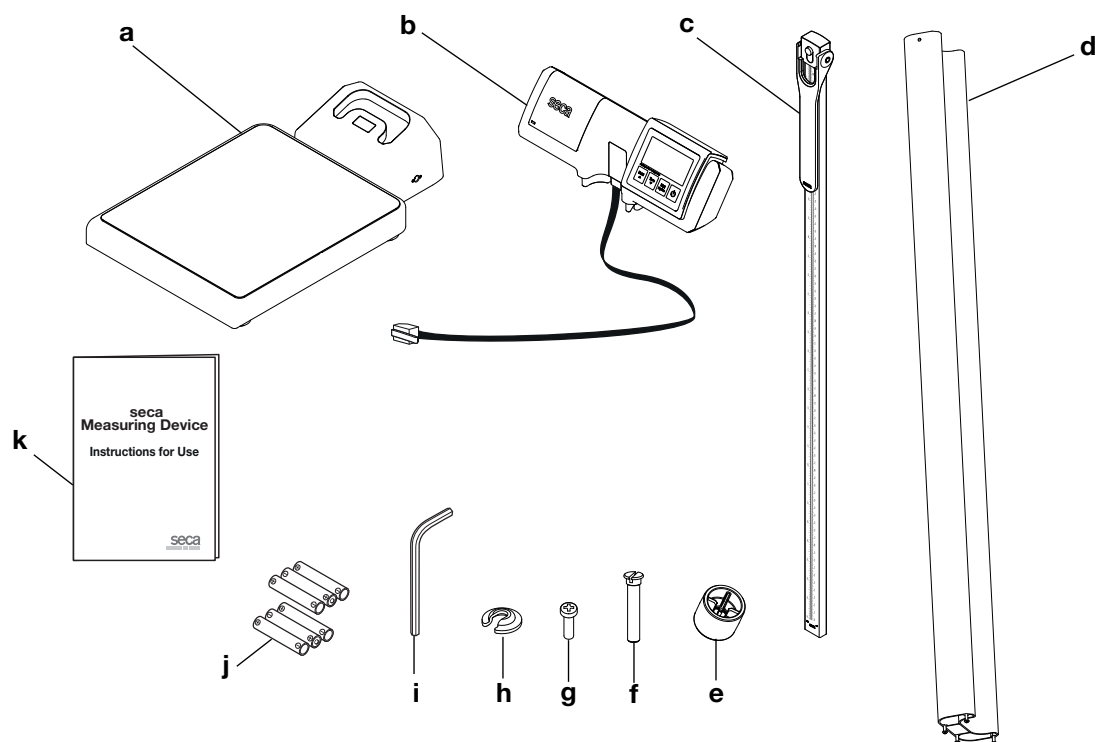
Text/symbol	Meaning
	Device complies with EU directives
	FCC symbol (USA)
<b>FCC ID</b>	For USA: Device license number from the Federal Communications Commission (FCC)
<b>IC</b>	For Canada: Device license number from Industry Canada
	Type plate on the power supply connection socket <ul style="list-style-type: none"> <li>• <b>xx V</b>: Supply voltage required</li> <li>• <b>max xx A</b>: Maximum current consumption</li> <li>• : Note polarity of connector plug</li> <li>• : Operate device with direct current</li> </ul>
	Do not dispose of device with household waste

### 3.5 Markings on the packaging

	Protect from moisture
	Arrows indicate top of product Transport and store in an upright position
	Fragile Do not throw or drop
	Permitted min. and max. temperature for transport and storage
	Permitted min. and max. moisture for transport and storage
	Open packaging here
	Packaging material can be disposed of through recycling programs

## 4. START UP DEVICE

### 4.1 Scope of delivery



Item	Component	Pcs.
a	Weighing platform with column holder	1
b	Display head with display unit and connecting cable	1
c	Measuring rod	1
d	Column (with four pre-fitted screws)	1
e	Spacer sleeves	2
f	Slot-head screws	2
g	Cross-head screws	2
h	Lock washers	4
i	T20 hex key	1
j	Batteries (Type AA, 1.5 V)	6
k	Instructions for use	1

### 4.2 Assembling the device

#### NOTE

- Use an assistant to perform the assembly.
- We recommend placing the components on the floor and only standing the device up once you have fitted the measuring rod and the column.

### Tools required

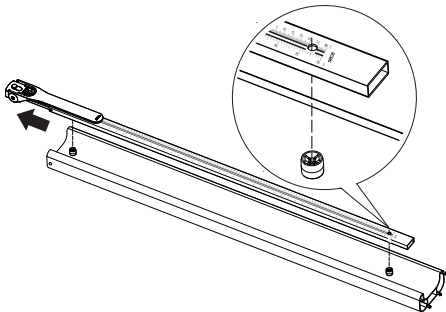
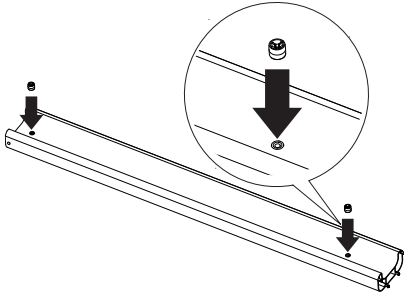
In addition to the scope of delivery, you require the following tools:

Tool	Size
Slot-head screwdriver	1x5.5 mm
Cross-head screwdriver	PH 2

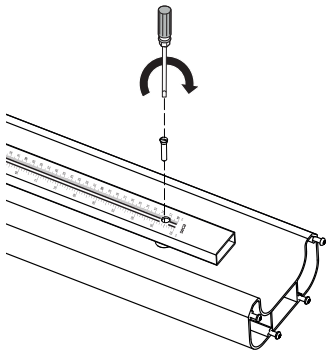
### Fitting the measuring rod

Proceed as outlined below to fit the measuring rod to the column.

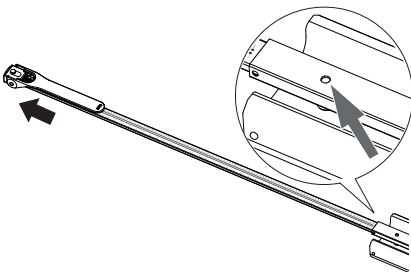
1. Lie the column down on the floor.
2. Place the spacer sleeves on the bores in the column.



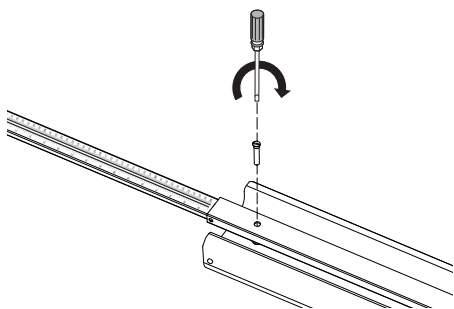
3. Extend the upper telescopic element far enough to expose the lower assembly bore in the lower telescopic element.
4. Position the measuring rod on the spacer sleeves as shown in the diagram.



5. Place a slot-head screw in the lower assembly bore and the spacer sleeve underneath it.
6. Tighten the slot-head screw.



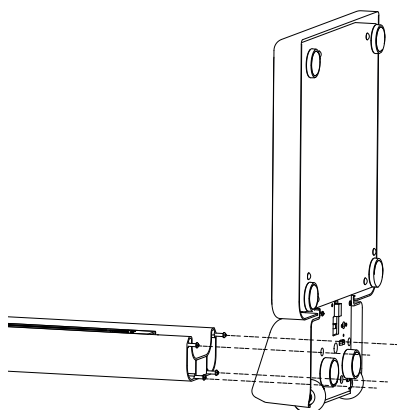
7. Extend the upper telescopic element far enough to expose the upper assembly bore in the lower telescopic element.



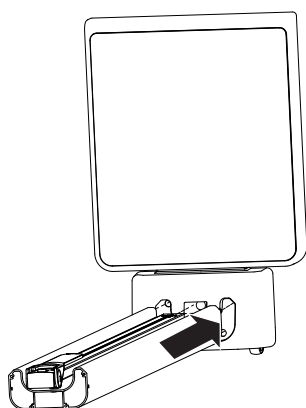
8. Place a slot-head screw in the upper assembly bore and the spacer sleeve underneath it.
9. Tighten the slot-head screw.
10. Push the upper telescopic element into its lowest position.

**Fitting the column**

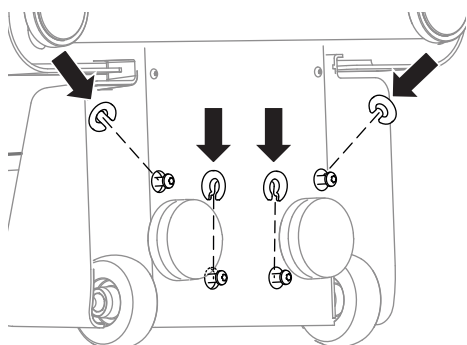
Proceed as outlined below to fit the column to the weighing platform.



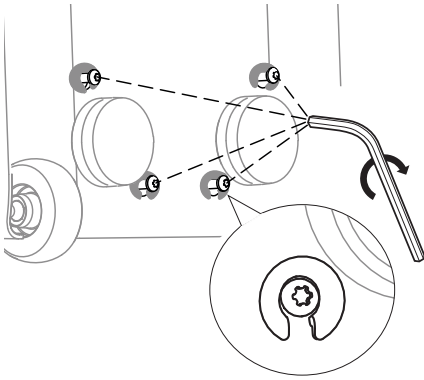
1. Lie the column on the floor and position the weighing platform as shown in the diagram.
2. Hold the weighing platform steady.



3. Push the column and measuring rod into the openings in the column holder of the weighing platform.  
The screws on the column protrude from the underside of the weighing platform.



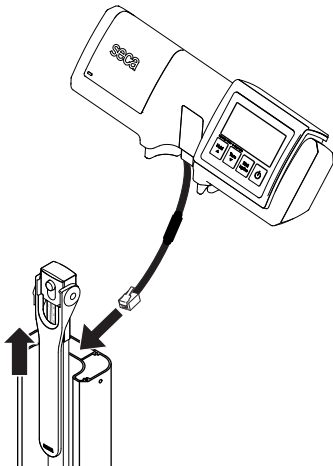
4. Place one lock washer in each of the bores for the screws.



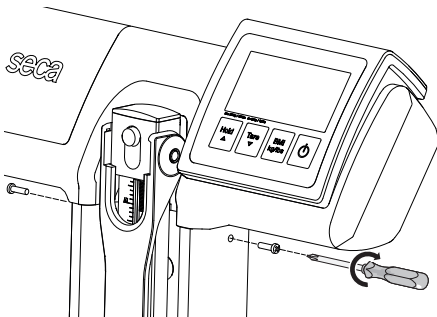
5. Tighten the screws using the T20 hex key supplied (recommended tightening torque: 3 Nm).
6. Set the measuring station in an upright position.

### Fitting the display head

Proceed as outlined below to fit the display head to the column.



1. Extend the upper telescopic element of the measuring rod approx. 10 cm.
2. Guide the connecting cable of the display head through the center channel of the column as far as the lower part of the device.
3. Place the display head on the column.
4. Push the upper telescopic element into its lowest position.



5. Place one cross-head screw in each of the two side bores of the column.
6. Tighten the cross-head screws.
7. Place the measuring station on the floor with the display unit facing upward.



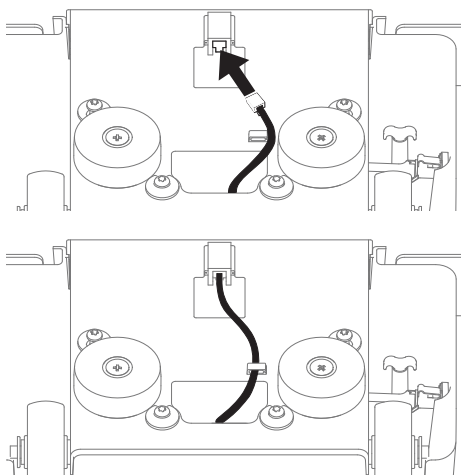
**NOTICE!**

**Damage due to assembly faults**

If the cables are bent at too sharp an angle, they may be damaged and thus cause a functional failure.

- ▶ Route all cables to prevent sharp bends and kinked connectors.

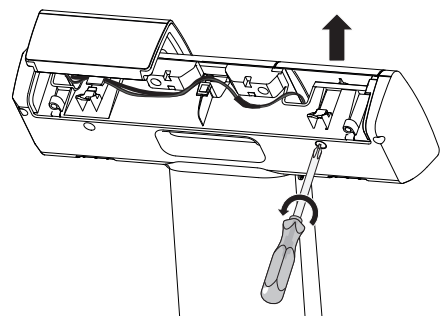
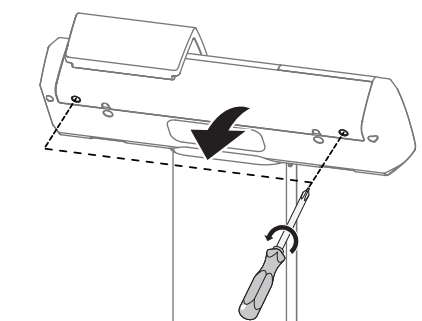
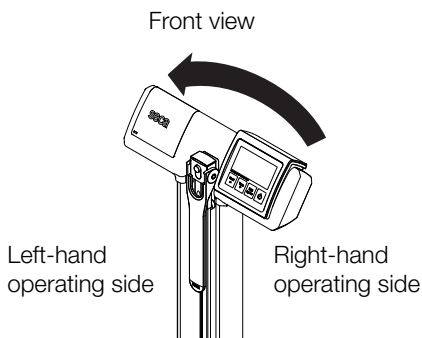
8. Connect the connecting cable:
  - a) Draw the connecting cable out of the column
  - b) Route the connecting cable past the cable clip and insert in the socket on the weighing platform
  - c) Fix the connecting cable in position with the cable clip



**Switching the positions of the display unit and the battery compartment**

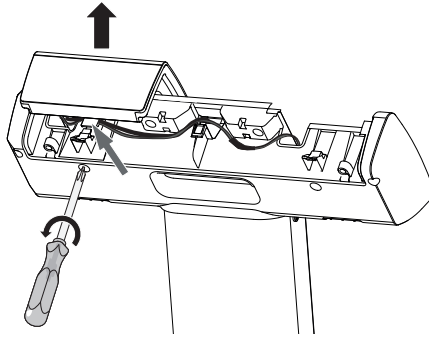
At the factory, the display unit is fitted to the right-hand operating side of the display head. The battery compartment is on the left-hand operating side.

Proceed as outlined below to switch the positions of the display unit and the battery compartment.

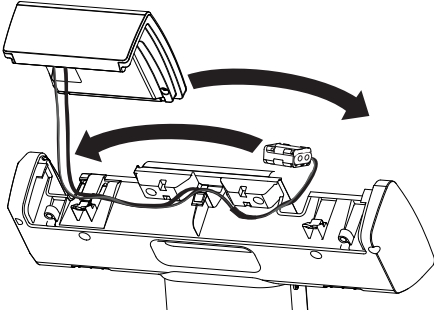


1. Remove the cover panel:
  - a) Unscrew two cross-head screws
  - b) Remove the cover panel
2. Remove the battery compartment lid:
  - a) Hold the battery compartment lid steady
  - b) Remove the cross-head screw behind the battery compartment lid
  - c) Remove the battery compartment lid
3. Remove the battery holder

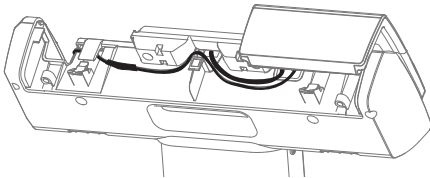
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4. Remove the display unit:
  - a) Undo the cross-head screw behind the display unit
  - b) Remove cable tie on the cable hook, if present
  - c) Draw cables out of the cable hook
  - d) Lift off display unit



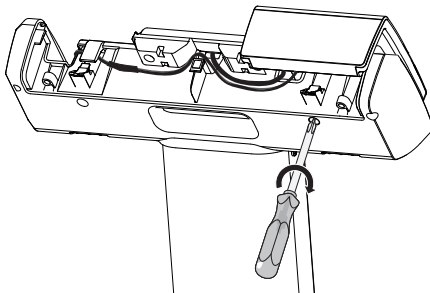
5. Switch the positions of the display unit and the battery holder:
  - a) Put the battery holder in its new position
  - b) Carefully put the display unit in its new position



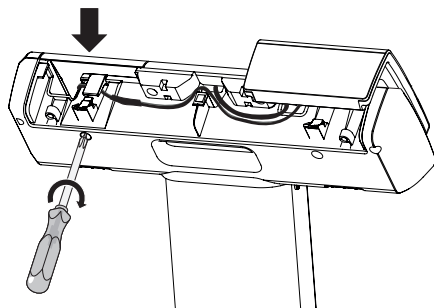
6. Route the cables so that they do not dangle out of the display head.

**NOTE**

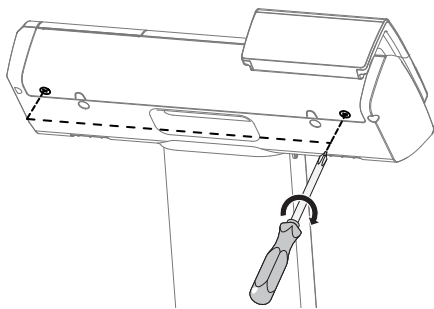
When fitting on the right-hand operating side: You can gather all the cables into the cable hook and secure them with a cable tie if necessary.



7. Fit the display unit:
  - a) Hold the display unit steady
  - b) Tighten the cross-head screw behind the display unit



8. Fit the battery compartment lid:
  - a) Insert the battery compartment lid and hold it steady
  - b) Tighten the cross-head screw behind the battery compartment lid



### Setting up the device

9. Fit the cover panel:
  - a) Put on the cover panel
  - b) Place and tighten two cross-head screws

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



#### CAUTION!

#### Incorrect measurement as a result of incorrect setup location and incorrect ambient conditions

Soft floors such as wooden hallways, for example, give under the patient's weight and falsify the measuring result. Incorrect ambient conditions lead to measuring faults.

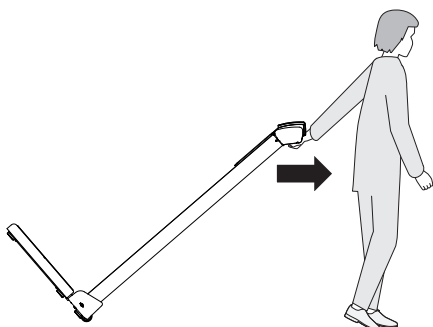
- ▶ Select a setup location with a level, stable floor in order to achieve precise measuring results.
- ▶ Use the device only in the intended ambient conditions (→ "Technical data", page 29).

2. Remove the protective film from the display.

### Disinfecting the device

- ▶ Disinfect the following components **before** initial commissioning (→ "Disinfecting", page 26):
  - Column and recessed handle
  - Display head and display unit
  - Weighing platform

## 4.3 Transporting the device



The device is equipped with two casters to facilitate transport over short distances.

1. If necessary, remove the plug-in power supply unit from the power socket and from the device.
2. Fold down the measuring flap and push the upper telescopic element of the measuring rod into its lowest position.
3. Take hold of the recessed handle of the device.
4. Tilt the device until it can be moved freely on the casters.
5. Move the device slowly and carefully over door sills.



#### CAUTION!

#### Incorrect measurement as a result of incorrect setup location and incorrect ambient conditions

Soft floors such as wooden hallways, for example, give under the patient's weight and falsify the measuring result. Incorrect ambient conditions lead to measuring faults.

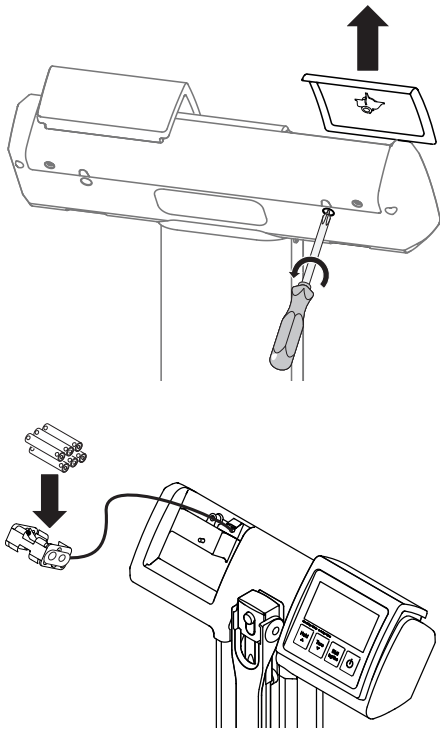
- ▶ Select a setup location with a level, stable floor in order to achieve precise measuring results.
- ▶ Use the device only in the intended ambient conditions (→ "Technical data", page 29).

6. Transport the device to its new setup location.
7. Set the device in an upright position.

- If necessary, plug the plug-in power supply unit into the device and into the power socket (→ “Connecting the plug-in power supply unit (optional)”, page 20).

## 4.4 Establishing the power supply

### Inserting batteries



You need six AA-type batteries, 1.5 V. To establish the power supply, proceed as follows:

- Open the battery compartment:
  - Hold the battery compartment lid steady
  - Remove the cross-head screw behind the battery compartment lid
  - Remove the battery compartment lid

- Put the new batteries into the battery holder in the battery compartment.

#### NOTE

- If replacing batteries: Dispose of the old batteries (→ “Batteries and rechargeable batteries”, page 30).
- Ensure the correct polarity of the batteries (markings on the battery holder). If **bAtt** appears in the display, you have inserted one of the batteries the wrong way round or the batteries have discharged. If batteries are inserted the wrong way round, they must be removed again immediately.

- Close the battery compartment:
  - Insert the battery compartment lid
  - Tighten the cross-head screw behind the battery compartment lid

### Connecting the plug-in power supply unit (optional)

The seca plug-in power supply unit is available as an option.



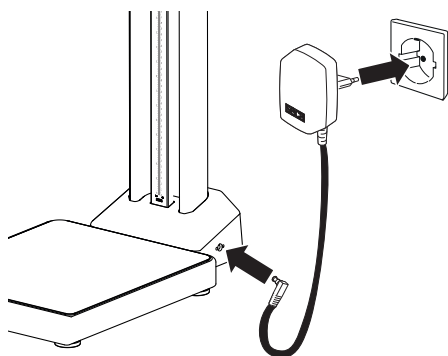
#### WARNING!

#### Personal injury or damage to the device as a result of incorrect power supply units

Conventional power supply units may deliver a higher voltage than is indicated on them. The measuring station may overheat, catch fire, melt or short-circuit.

- ▶ Use only original seca plug-in power supply units with controlled 12 V output voltage.

The connection for the plug-in power supply unit is located on the side of column holder. To establish the power supply, proceed as follows:



1. Insert the connector plug of the plug-in power supply unit into the power supply connection socket of the measuring station.
2. Plug the plug-in power supply unit into a power supply socket.

## 5. OPERATION

### 5.1 Switching the device on and off

#### Switching on the device



1. Ensure that there is no load on the scale.
2. Press the on/off key.  
All the elements of the display are shown briefly, then **seca** appears in the display.  
The measuring station is operational when **0.0** is displayed.

#### Switching off the device



- ▶ Press the on/off key.

#### NOTE

In battery mode, the measuring station remains on standby for 30 seconds. If there is no input or no load is put on the scale during standby time, the measuring station switches off automatically.

### 5.2 Switching units of measurement (depends on variant)



#### CAUTION! Patient hazard

In order to avoid misinterpretations, measuring results for medical use must be displayed and used in SI units (weight: kilogrammes, length: metres) only. Some devices offer the ability to display measuring results in other units. This is only an additional function.

- ▶ Use the results exclusively in SI units.
- ▶ The use of measurement results in non-SI units is the sole responsibility of the user.

You can switch between the metric unit kilogram and the imperial unit pounds during the measuring process.



1. Switch on the measuring station (→ “Switching on the device”, page 21).



2. Keep the **BMI kg/lbs** key depressed until the unit of measurement display changes.

## 5.3 Measuring weight

### Weighing



#### CAUTION!

##### Injury from incorrect position of the measuring flap

Injuries may result if the measuring flap is at patient height when folded out.

- ▶ Ensure that the measuring flap is above patient height before the patient steps onto the weighing platform.



#### CAUTION!

##### Incorrect measurement as a result of force shunt

If the patient is in contact with parts other than the weighing platform during the weight measurement, measuring results will be incorrect.

- ▶ Ensure that the patient is in contact only with the weighing platform during weight measurement.



1. Switch on the measuring station (→ “Switching on the device”, page 21).
2. Ask the patient to step onto the scale:
  - Do not touch the measuring rod
  - Do not touch the column and the display head
3. Read off the measuring result.

### Taring off additional weight (Tare)

Use the **Tare** function to prevent an additional weight (e.g. a walking stick) affecting the patient’s weight value.



#### CAUTION!

##### Incorrect measurement as a result of force shunt

If an additional weight is in contact with the surface on which the device is resting, measuring results will be incorrect.

- ▶ Make sure that additional weights are placed only on the scale's weighing platform.

#### NOTE

The maximum weight which can be displayed is reduced by the weight of the objects which have been tared off.



1. Switch on the measuring station (→ “Switching on the device”, page 21).
2. Place the additional weight on the weighing platform.
3. Keep the **Tare** ▾ key depressed until the message **NET** is displayed.
4. Wait until the display stops flashing and **0.0** is displayed instead.

#### NOTE

If you remove the additional weight again, - - - - will be displayed.

5. Ask the patient to step onto the weighing platform with the additional weight (or carrying the additional weight).  
The patient's weight is displayed. The additional weight is deducted automatically.



6. Read off the measuring result.
7. To deactivate the **Tare** function, keep the **Tare** ▾ key depressed until the message **NET** is no longer displayed.

**NOTE**

When you switch off the measuring station, the **Tare** function is deactivated automatically.

**Display weight permanently (Hold)**



If you activate the **Hold** function, the weight value is displayed permanently.

1. Press the **Hold** △ key.  
The display flashes until a stable weight is measured. The weight value is displayed permanently. The message △ **HOLD** is displayed.
2. Read off the measuring result.
3. To deactivate the **Hold** function, press the **Hold** △ key.

## 5.4 Measuring height

You can measure height using the integrated measuring rod.



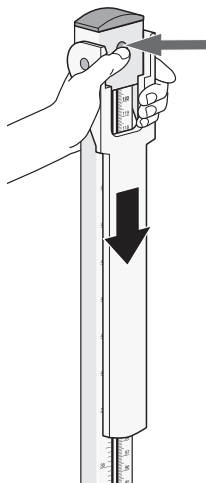
**CAUTION!**

**Injury from incorrect position of the measuring flap**

Injuries may result if the measuring flap is at patient height when folded out.

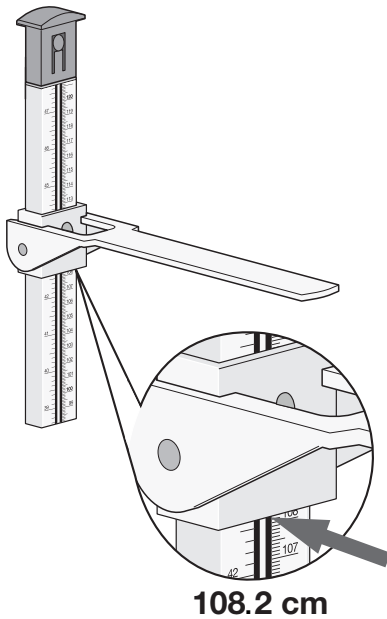
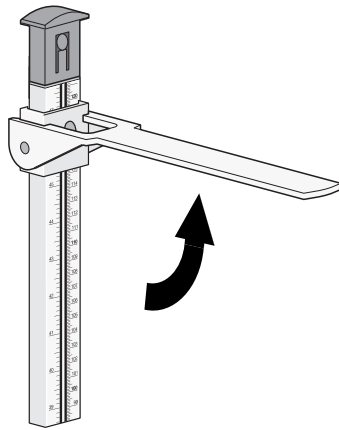
- ▶ Ensure that the measuring flap is above patient height before the patient steps onto the weighing platform.

**Measuring heights < 1.22 m**

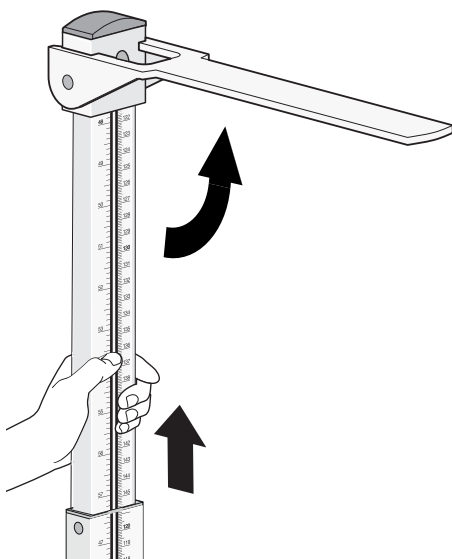


When measuring heights < 1.22 m, the measuring result is read off under the head slide (read-off edge 1).

1. Ensure that the upper telescopic element is in its lowest position.
2. Release the head slide by pressing on the latch and moving the head slide downward.



### Measuring heights > 1.22 m

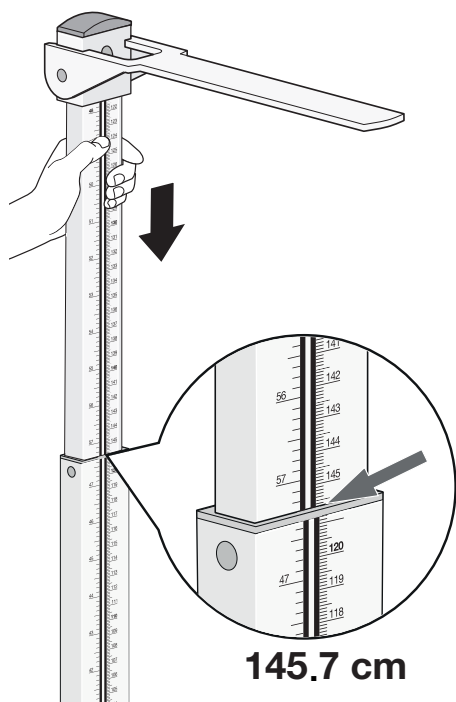


3. Fold up the measuring flap until it engages in a horizontal position.
  4. Ask the patient to stand under the measuring flap:
    - Upright posture
    - Head straight (Frankfort horizontal plane, parallel to measuring flap)
  5. Push the head slide on the lower telescopic element down until the measuring flap is in contact with the patient's head.
- 
6. Read off the measuring result below the head slide (read-off edge 1) (in this case: 108.2 cm).  
You have the following options for continuing:
    - ▶ Make a note of the measuring result
    - ▶ Enter the measuring result on the display unit (→ "Calculating and displaying body mass index (BMI)", page 25).
  7. Ask the patient to step off the weighing platform.
  8. Fold down the measuring flap.
  9. Push up the head slide until it engages in the latch.

When measuring heights > 1.22 m, the measuring result is read off on the lower telescopic element (read-off edge 2).

1. Fold up the measuring flap until it engages in a horizontal position.
2. Extend the upper telescopic element until the patient can get under the measuring flap comfortably.
3. Ask the patient to stand under the measuring flap:
  - Upright posture
  - Head straight (Frankfort horizontal plane, parallel to measuring flap)



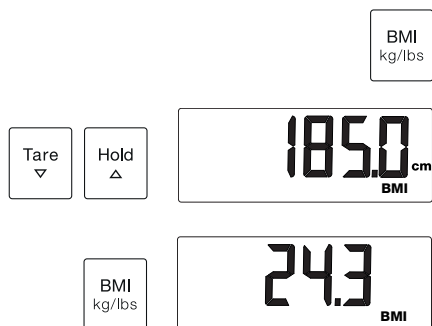


4. Push the upper telescopic element down until the measuring flap is in contact with the patient's head.
5. Read off the measuring result on the lower telescopic element (read-off edge 2) (in this case: 145.7 cm).  
You have the following options for continuing:
  - ▶ Make a note of the measuring result
  - ▶ Enter the measuring result on the display unit (→ “Calculating and displaying body mass index (BMI)”, page 25).
6. Ask the patient to step off the weighing platform.
7. Push the upper telescopic element into its lowest position.
8. Fold down the measuring flap.

## 5.5 Calculating and displaying body mass index (BMI)

Body mass index puts height and weight in a relationship to one another.

1. Determine the patient's weight value (→ “Measuring weight”, page 22).
2. Determine the patient's height value (→ “Measuring height”, page 23).
3. Press the **BMI kg/lbs** key briefly.  
The last height entered in cm and **BMI** are displayed.
4. Use the **Tare** ▽ and **Hold** △ keys to enter the height value in centimeters.



5. Press the **BMI kg/lbs** key briefly.  
BMI is calculated and displayed automatically.
6. Press the **BMI kg/lbs** key briefly.  
The display reverts to the weight value.

## 6. HYGIENE TREATMENT



### **WARNING!**

#### **Electric shock**

The device is not de-energized when the on/off key is pressed and the display goes out. Use of fluids on the device may cause electric shock.

- ▶ Ensure that the device is switched off before performing any hygiene treatment.
- ▶ Disconnect the power supply connector before performing any hygiene treatment.
- ▶ Before each hygiene treatment, take the rechargeable battery out of the device (if present and removable).
- ▶ Ensure that no fluids penetrate the device.

### **NOTICE!**

#### **Damage to device**

Inappropriate detergents and disinfectants may damage the sensitive surfaces of the device.

- ▶ Do not use caustic or abrasive detergents.
- ▶ Do not use organic solvents (e.g. white spirit or petroleum spirit).

### 6.1 Cleaning

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- ▶ Use a soft cloth dampened with mild soapsuds to clean the surfaces of the device.

### 6.2 Disinfecting

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1. Disinfect the device with an alcohol-based disinfectant at regular intervals.
2. Follow the instructions for use for the disinfectant.
3. Disinfect the device:
  - ▶ Moisten a soft cloth with disinfectant and wipe down the device with it.
  - ▶ Comply with the intervals: see table.

Interval	Component
<b>Before</b> every measurement	<ul style="list-style-type: none"><li>• Weighing platform</li><li>• Head slide with measuring flap</li></ul>
<b>After</b> every measurement	<ul style="list-style-type: none"><li>• Weighing platform</li><li>• Head slide with measuring flap</li></ul>
As required	<ul style="list-style-type: none"><li>• Column and display head of measuring station</li><li>• Telescopic elements of the measuring rod</li><li>• Recessed handle</li></ul>

## 6.3 Sterilizing

---

This device may not be sterilised.

## 7. FUNCTION CHECK

- ▶ Perform a function check prior to each use.

A complete function check includes:

- Visual inspection for mechanical damage
- Checking the alignment of the device
- Visual and function check of the display elements
- Function check of all the controls shown in the section entitled “Overview”
- Function check of optional accessories

If you notice any faults or deviations during the function check, first try to resolve the error with the aid of the section entitled “Troubleshooting” in this document.




### **CAUTION!**

#### **Personal injury**

If you notice any faults or deviations during the function check which cannot be resolved with the aid of the section entitled “Troubleshooting” in this document, you may not use the device.

- ▶ Have the device repaired by seca Service or by an authorized service partner.
- ▶ Follow the section entitled “Servicing” in this document.

## 8. TROUBLESHOOTING

Problem	Cause	Remedy
No weight is displayed with a load on the scale	The device has no power supply	<ul style="list-style-type: none"> <li>• Switch on the measuring station</li> <li>• In the case of battery mode: Insert batteries</li> <li>• In the case of power supply mode: Connect the plug-in power supply unit</li> </ul>
0.0 does not appear before weighing	A load was already on the device before it was switched on	<ul style="list-style-type: none"> <li>• Take the load off the measuring station</li> <li>• Switch off the measuring station, then switch it back on again</li> </ul>
----- appears before weighing	A load was already on the device before it was switched on	<ul style="list-style-type: none"> <li>• Take the load off the measuring station</li> <li>• Switch off the measuring station, then switch it back on again</li> </ul>
The weight display flashes	Consistent weight value has not yet been detected	<ul style="list-style-type: none"> <li>• One of the following functions is active: <b>Hold, Autohold, Tare</b>. Wait until the measuring station has detected a consistent weight value. The display stops flashing.</li> <li>• Take the load off the measuring station, wait until <b>0.0</b> is displayed and weigh again</li> </ul>
One display segment is displayed continuously or not at all	The display is defective	<ul style="list-style-type: none"> <li>• Inform seca Service</li> </ul>
 is displayed	Battery voltage is dropping	<ul style="list-style-type: none"> <li>• Change the batteries</li> </ul>
bAtt is displayed	The batteries have discharged	<ul style="list-style-type: none"> <li>• Change the batteries</li> </ul>
StOP is displayed	Maximum capacity has been exceeded	<ul style="list-style-type: none"> <li>• Take the load off the measuring station</li> </ul>
Er:[No.]:11 is displayed	The device has too high a load or too high a load in one corner	<ul style="list-style-type: none"> <li>• Remove the load from the measuring station or distribute the weight more evenly</li> <li>• Switch off the measuring station, then switch it back on again</li> <li>• If the problem persists, inform seca Service</li> </ul>
Er:[No.]:12 is displayed	The device has been switched on with too high a load	<ul style="list-style-type: none"> <li>• Take the load off the measuring station</li> <li>• Switch off the measuring station, then switch it back on again</li> </ul>
Er:[No.]:16 is displayed	The device was caused to oscillate, the zero point could not be determined	<ul style="list-style-type: none"> <li>• Switch off the measuring station, then switch it back on again</li> </ul>
Er:[No.]:32 is displayed	An internal communication error has occurred	<ul style="list-style-type: none"> <li>• Switch off the measuring station, then switch it back on again</li> <li>• If the problem persists, inform seca Service</li> </ul>

## 9. SERVICING

The product must be set up carefully and serviced regularly. Depending on how frequently the product is used, we recommended servicing at intervals of 3 to 5 years.





### CAUTION!

#### Incorrect measurements as a result of poor servicing

- ▶ Have servicing and repairs carried out exclusively by seca Service or by an authorized service partner.
- ▶ You can find service partners in your area at [www.seca.com](http://www.seca.com) or by sending an e-mail to [service@seca.com](mailto:service@seca.com).

## 10. TECHNICAL DATA

### 10.1 General technical data

General technical data	
Dimensions	
• Depth	576 mm
• Width	408 mm
• Height (measuring rod not extended)	1358 mm
Weight of measuring station	approx. 13.1 kg
Ambient conditions, operation	
• Temperature	+10 °C to +40 °C / +50 °F to 104 °F
• Air pressure	700 – 1060 hPa
• Humidity	30 % – 80 %, no condensation
Ambient conditions, storage	
• Temperature	-10 °C to +65 °C / +14 °F to 149 °F
• Air pressure	700 – 1060 hPa
• Humidity	0 % – 95 %, no condensation
Ambient conditions, transport	
• Temperature	-10 °C to +65 °C / +14 °F to 149 °F
• Air pressure	700 – 1060 hPa
• Humidity	0 % – 95 %, no condensation
Power supply	
• Batteries	
- Supply voltage	9 V
- Battery type	6 x type AA, 1.5 V
• Plug-in power supply unit (optional accessory)	
- Supply voltage	12 V
- Maximum power consumption	typically 500 mA
- Insulated device, protection class II (EN 60601-1)	
Supply voltage	100 V – 240 V
Power supply frequency	50 Hz – 60 Hz
Power consumption	approx. 37 mA
Maximum runtime in battery mode (USB interface not active)	approx. 32 hours
Metrology data, measuring rod	
• Measuring range 1	10 cm – 122 cm (4 inch – 48 inch)
• Measuring range 2	122 cm – 230 cm (48 inch – 90.5 inch)
• Graduations	1 mm (1/8 inch)
• Accuracy	± 5 mm
Medical device in accordance with Directive 93/42/EEC	Class I with measuring function
EN 60601-1: medical electrical device, Type B	
Type of protection	IP20
Duty cycle	Continuous duty

### 10.2 Weighing data

Weighing data	
Maximum capacity	250 kg/550 lbs
Minimum capacity	0.2 kg/0.4 lbs

Weighing data	
Increments	0.1 kg/0.2 lbs
Tare range	up to 250 kg (subtractive)
Accuracy	± 100 g (0.22 lbs) ± 0.15 %
<ul style="list-style-type: none"> <li>• 0 kg to 70 kg (0 lbs to 132 lbs)</li> <li>• 70 kg to 250 kg (132 lbs to 551 lbs)</li> </ul>	

## 11. OPTIONAL ACCESSORIES

Accessory	Article number
Power supply: <ul style="list-style-type: none"> <li>• Switch-mode power supply: 100–240 V~ / 50–60 Hz / 12 V= / 0.5 A</li> </ul>	68-32-10-270

## 12. DISPOSAL

### 12.1 Device



Do not dispose of the device with household waste. The device must be disposed of properly as electronic waste. Comply with the national provisions applicable in your country. For further information contact our service department at:

[service@seca.com](mailto:service@seca.com)

### 12.2 Batteries and rechargeable batteries



Spent (rechargeable) batteries should not be discarded with household waste, regardless of whether they contain harmful substances or not. As a consumer you are obliged by law to dispose of (rechargeable) batteries via the collection points set up by the municipal authorities or the retail sector. Only discard (rechargeable) batteries when fully discharged.

## 13. WARRANTY

We offer a two-year warranty from the date of delivery for defects attributable to faulty material or poor workmanship. This excludes all moveable parts such as (rechargeable) batteries, cables, power supply units, etc. Defects which are covered by the warranty shall be rectified free of charge for customers on production of the sales receipt. No further claims can be accepted. The costs of shipment in both directions shall be borne by the customer where the device is not located at the customer's premises. In the event of any damage during shipment warranty claims can only be asserted where the complete original packaging was used for shipment and the scales were secured inside in the same manner as in the original packaging. You should therefore keep all packaging.

The warranty shall become null and void where the device is opened by persons not expressly authorised to do so by seca.

In the event of a warranty issue, please contact your local seca office or the dealer from whom you ordered the product.

## 14. DECLARATIONS OF CONFORMITY

### 14.1 For Europe

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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](http://www.seca.com).

### 14.2 For USA and Canada

---

#### NOTE

This device complies with Part 15 of the FCC Rules and with RSS-210 of Industry Canada. Operation is subject to the following two conditions:

- This device may not cause harmful interference.
- This device must accept any interference received, including interference that may cause undesired operation.

#### NOTE

Changes or modifications made to this equipment not expressly approved by seca may void the FCC authorization to operate this equipment.

#### NOTE

Radiofrequency radiation exposure information:  
This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance of 1 m between the radiator and your body. This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

# Medical Measuring Systems and Scales since 1840

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