



OPERATING INSTRUCTIONS

IONTO-SONO INTENSE

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General safety instructions

The operating instructions ensure safe handling of the IONTO-SONO Intense ultrasound device. Please always keep the operating instructions close to the IONTO-SONO Intense ultrasound device and accessible to every user.

Refer to the “Scope of delivery” section to check whether the contents are complete and undamaged. If in doubt contact our customer service department.

Notes on reading

The operating instructions describe the proper use of the IONTO-SONO Intense ultrasound device.

Please read the operating instructions before using the ultrasound treatment device.

Please read the safety instructions carefully. They contain important safety instructions for setting up, operating and maintaining the ultrasound device.



INFO

The present operating instructions describe the basic equipment.

The features of your ultrasound treatment device can be found in the commercial documents relating to your ultrasound device.

- Please read the instructions carefully. They contain important safety instructions for setting up, operating and maintaining the device.
- The device may only be opened by the manufacturer or by personnel authorised by the manufacturer unless explicitly indicated in these instructions.
- Check the voltage (V) shown on the type plate. The voltage indicated must correspond to that of your power supply. Only then should you connect the device to the mains.
- The device must not be used if the mains power cable is damaged.
- Do not jam or kink the power cable and do not allow it to rest on any hot object, e.g. a radiator or lamp!
- If you notice that the power cable is damaged, switch the device off immediately. Disconnect it from the mains power supply. Contact our customer service department. Do not use the device again until you have received further information from the customer service department.
- Never remove the power cable from the mains socket with wet hands. Do not remove the plug from the mains socket by pulling the power cable.
- Always remove the plug from the mains socket before cleaning the device or reaching inside the device.
- Should any liquid or foreign body enter the inside of the device, disconnect the device from the power supply immediately! Contact our customer service department. Do not

use the device again until you have received further information from the customer service department.

- Never use the device in damp surroundings. Do not splash or immerse the device in liquid.
- The device is not suitable for use by children or people with reduced physical, sensory or mental capacities or a lack of experience or knowledge.
- For facial treatments, always pay particular attention to selecting suitable parameter settings, in particular the power setting.
- Always keep the ultrasound hand piece moving during the ultrasound treatment.
- In the case of ultrasound treatments, never treat one specific zone for longer, otherwise this may result in tissue damage.
- Do not use the ultrasound if either you or your customer has an electric pacemaker.

Further instructions

Personal protection

- The operating instructions are designed to ensure the safe use of the device. You should therefore always keep the operating instructions for future consultation. Keep it close to the device so that it is accessible for every user.
- In ultrasound operation, the device emits ultrasonic waves. Take this into consideration in your environment.
- The product and the instructions are designed for trained beauticians, doctors, alternative practitioners, medical professionals, wellness therapists and physiotherapists.
- If the device has been transported, give it time to adjust to the ambient temperature before using it.
- Do not use the ultrasound if either you or the person to be treated has an electric pacemaker.

Ultrasound treatment device

- Only use original accessories.
- If the device is used for any purpose other than that for which it was designed and as described in these operating instructions, the manufacturer's warranty and guarantee will be invalidated.
- These instructions cover the operation of functions which might only be available with optional equipment.
- Once the device has been unpacked, check the contents using the delivery slip to ensure that all parts have been included and that nothing has been damaged. If in doubt contact our customer service department.
- If the device has ventilation shafts, these must never be covered. Never cover the device and never build the device into a compartment.
- The ultrasound head is equipped with a sensitive ceramic piezo oscillator. Avoid blows to the ultrasonic surface and do not drop the ultrasound head onto the floor! Strong shocks or blows could change its physical properties!
- Do not use the touchscreen with damp hands or damp gloves.
- If you want to switch the device off and then on again, wait at least 10 seconds before switching it back on.

Treatment

- For facial treatments, always pay particular attention to selecting suitable parameter settings, in particular the power setting.
- Always keep the ultrasound hand piece moving during the ultrasound treatment.
- Please note that the higher intensity of the body programmes results in greater heat being conveyed to the tissue and that the ultrasound hand piece must therefore be moved more quickly across the skin.
- In the case of ultrasound treatments, never treat one specific zone for longer, otherwise this may result in tissue damage.
- Do not treat organs.
- Do not apply the treatment to the eyes, brain or spinal cord.
- Stop the treatment if unusually severe redness or reactions appear on the skin. A reaction may also occur due to a previously applied product (ingredient) and be intensified by the use of ultrasound.
- Stop the treatment or change the programme if the person being treated finds the heat unpleasant.

Field of use

The IONTO-SONO Intense is an ultrasound treatment device with a soft-ware controlled touchscreen monitor. The device emits frequencies of 1 MHz, 3 MHz and 10 MHz. The ultrasound treatment device is used for pre-programmed facial and body treatments.

After switching on, the ultrasound hand pieces and all functions will be checked by the processor by means of a self-test. The temperature of the ultrasound hand pieces and the skin contact will also be constantly monitored in order to avoid malfunctions and incorrect use. When a temperature threshold is reached, the ultrasound hand pieces switch themselves off for safety reasons. If any fault is detected, the ultrasound heads will be switched off as a precaution. The ultrasound treatment device complies with all current safety standards.

What is ultrasound?

Ultrasound refers to sound waves with frequencies that are higher than the upper audible limit of human hearing, i.e. higher than 20,000 Hz. They occur when high-frequency electric oscillations are transformed into mechanical oscillations. Ultrasound waves spread out in the soft parts of the body. The energy applied to the body causes every part of the tissue treated to be vibrating. Part of the absorbed energy is converted into heat.

Generally speaking, the following effects of ultrasound can be identified.

Different effects of ultrasound

Mechanical effect

Deep-penetrating micro-massage promoting cell metabolism, blood flow and an improved oxygen supply.

Thermal effect

Depending on the type of sound wave, vascular dilation, metabolic activation and lymph flow are promoted through the increased temperature in the zone treated.

Chemical effect

Improved diffusion, i.e. increased exchange of metabolic products similar to that obtained by the use of a catalyst. Shift in the pH value of the skin towards a more alkaline value, thereby revitalising the skin.

Phonophoresis

This is when active substances penetrate into deeper layers of the skin due to improved diffusion resulting from alternating ultrasound pressure. The effect and depth of penetration of the ultrasound are determined by the frequency, intensity, type of ultrasound, treatment time and type of tissue to be treated. Frequency and intensity are the predominant factors.

Properties of ultrasound

The properties of ultrasound are used in the field of cosmetics to bring about a positive change to specific skin conditions and to obtain a lasting improvement in the complexion. Ultrasound can be incorporated into any treatment as a supportive measure or be recommended as a spa treatment. There is a range of different applications.

Range of uses

- Skin regeneration
- Smoothing the skin relief
- Provision of active substances (also to support the treatment of scars and stretch marks)
- Reduction in impurities
- Reduction in rosacea
- Regeneration treatment for the body, face and bust
- Cellulite treatment

Biological effects

Thanks to its specific mechanical, thermal, chemical and phonophoretic actions, ultrasound has the following biological effects.

- Increased cell metabolism
- Regeneration of the skin
- Promotion of absorption of active substances and diffusion in the tissues
- Acceleration of lymphatic circulation
- Muscle relaxation
- Change in the pH value of the skin towards a more alkaline value

Thanks to the effects described above, the diffusivity of the body's electrolytes through the cell membrane and other active substances through the intact skin increases.

Contraindications

Conduct a detailed patient briefing before each ultrasound treatment. To this end, use the ultrasound information sheet included in the scope of delivery.

In general, only treat healthy people.

In the event of specific diseases, do not use ultrasound

Do not apply ultrasound treatment to any part of the body if the patient exhibits any of the following diseases. If in any doubt, seek qualified medical advice.

Conditions preventing use

- Heart diseases (cardiac arrhythmia, coronary artery disease) and pacemakers
- Cancer and malignant tumours or suspicion of malignant tumours
- Disorders of the nervous system, such as Parkinson's disease, epilepsy or multiple sclerosis
- Implanted insulin pump
- Pregnancy and breastfeeding
- Bacterial infections (e.g. boils, carbuncles, tuberculosis)
- Open skin damage (e.g. open wounds, inflammations)
- Post-operative scars, only after approx. 3 months
- Vascular diseases, e.g. thrombosis
- Blood clotting disorders
- Zones of the body with severe circulatory disorders
- Metal implants in the tissue to be treated
- Permanent aesthetic implants in the tissue to be treated
- Feverish state or signs of inflammation

Do not use ultrasound on specific parts of the body

Do not treat the following zones using ultrasound. If in any doubt, seek qualified medical advice.

Zones of the body not to be treated

- Brain
- Spinal cord
- Eyes and eye lids
- Thyroid
- Gonads (breasts, ovaries, etc.)
- Heart
- Bone growth zones in children and youths

Description

Ultrasound treatment device

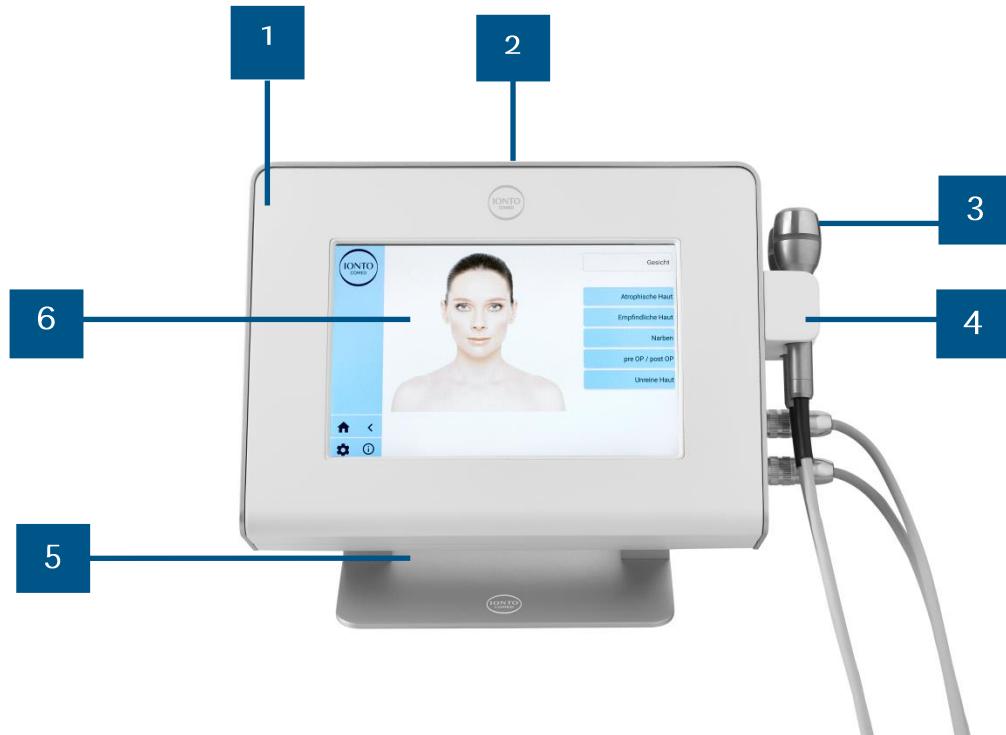


Fig. 1 Ultrasound treatment device with
Software-controlled touchscreen monitor

1	Housing	2	On/off button
3	Ultrasound hand pieces	4	Hand piece holder
5	Tilt-adjustable stand	6	Display

1 MHz /3 MHz ultrasound hand piece

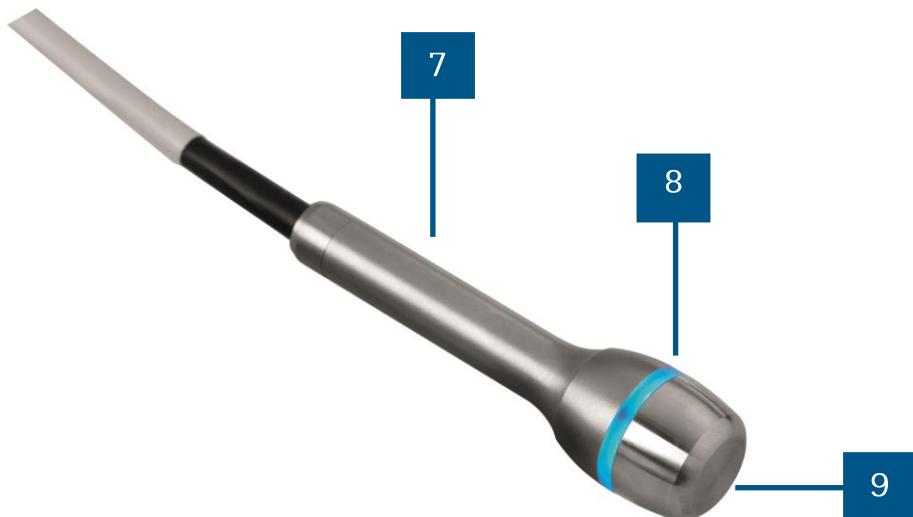


Fig. 2: 1 MHz /3 MHz ultrasound hand piece

7	Handle	8	LED ring
9	2.5 cm ² ultrasound surface (beam area of the piezo element)		

3 MHz / 10 MHz ultrasound hand piece

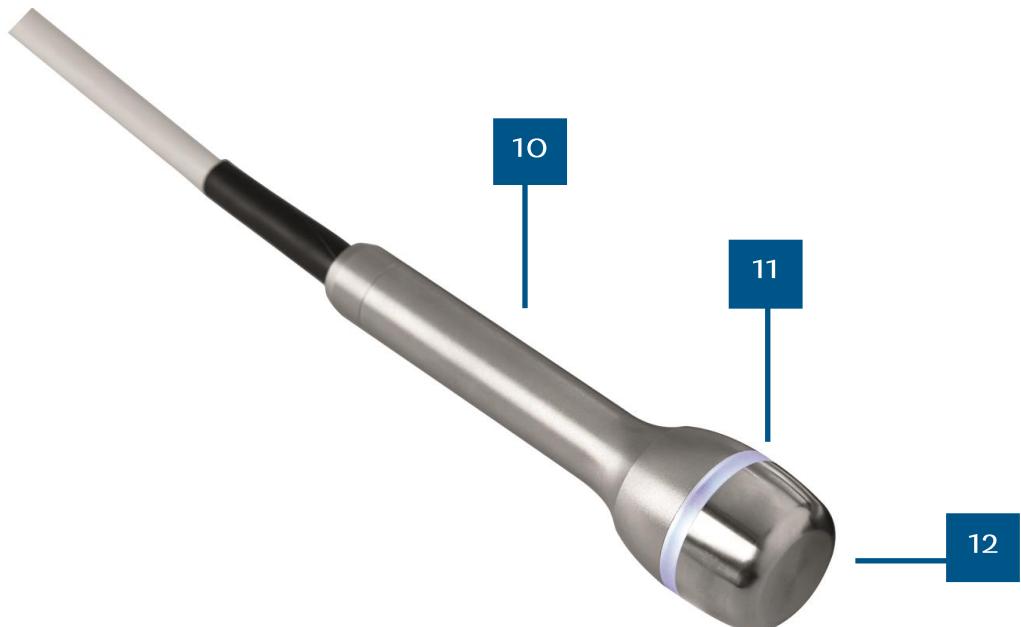


Fig. 3: 3 MHz / 10 MHz ultrasound hand piece

10	Handle	11	LED ring
12	2 cm ² ultrasound surface (beam area of the piezo element)		

Control elements

Main menu

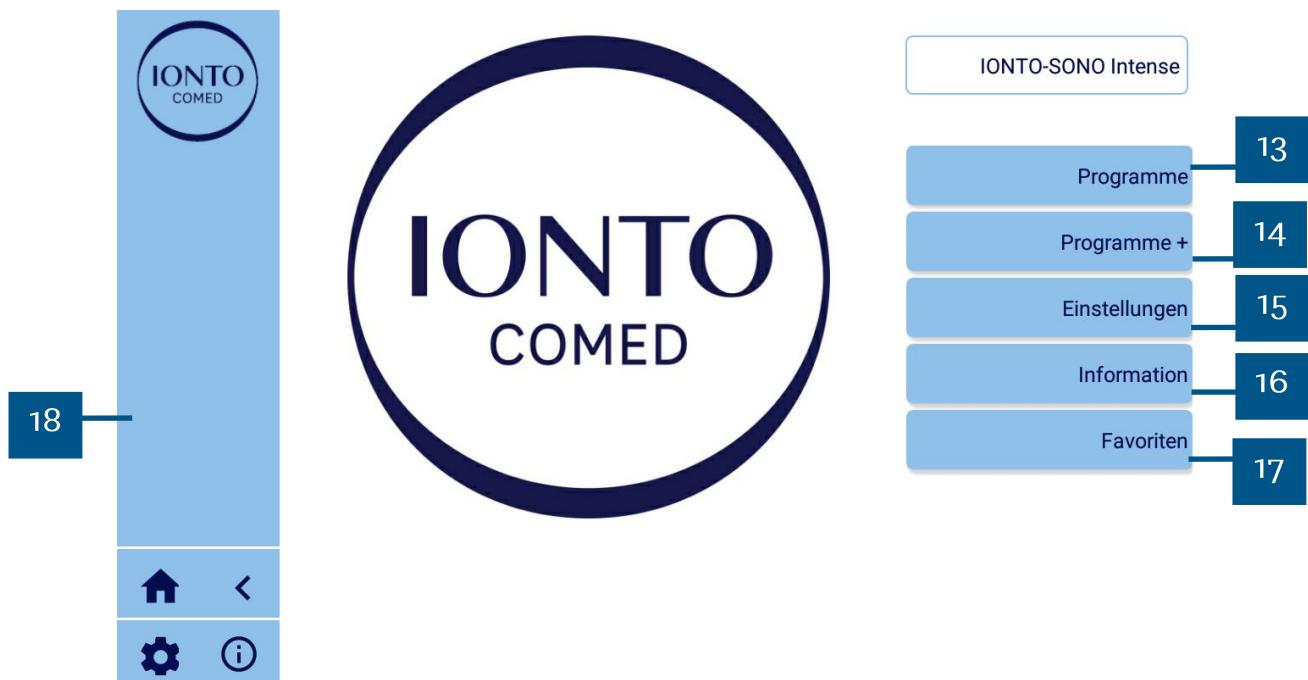


Fig. 4: Main menu on the display

13	Programmes	14	Programme +
15	Settings	16	Information
17	Favourites	18	Left-hand menu bar

Functions of the control elements

Control elements	Contents
13 Programmes (suitable for beginners)	<ul style="list-style-type: none"> — Face — Body
14 Programme+ (suitable for experienced users)	All 30 programmes listed below one another.
15 Settings	<ul style="list-style-type: none"> — Volume — Language — Skin contact recognition of the hand piece — USB stick — Service — Logcar
16 Information	<ul style="list-style-type: none"> — Operating instructions — Treatment instructions — Treatment zones — Contraindications — Operating principle — Studies — Video — Safety information — Help — FAQs
17 Favourites	Saving and calling up favourite programmes.

Symbols and meanings of the menu bar



INFO

This menu bar remains unchanged for all programmes.

Symbol	Explanation	Meaning
	Symbol: Main menu	The “Main menu” symbol provides quick access to the main menu regardless of the current menu item.
	Symbol: Back	The “Back” symbol allows you to exit the selected programme.
	Symbol: Settings	The “Settings” symbol enables you to change the device settings.
	Symbol: Information	The “Information” symbol enables you to call up an additional 10 information fields.

Treatment

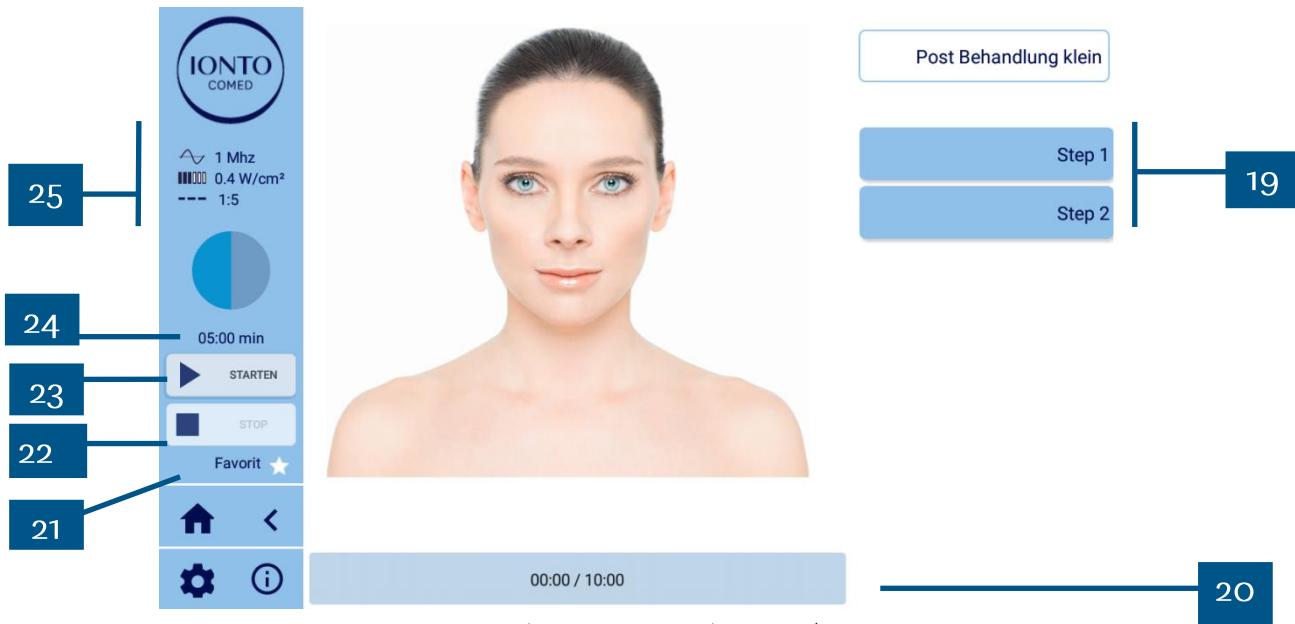


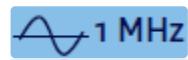
Fig. 5: Treatment is opened

19	Steps	20	Total time
21	Set favourite (optional)	22	Stop button
23	Start/pause button	24	Time per step
25	Preset parameters of the individual programmes		

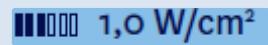
25

Preset parameters of the individual programmes

Frequency



Intensity



Mode



Control elements	Functions
19 Steps	Depending on the treatment, the programmes installed have between 1 and 6 steps. When changing from one step to another, you may have to change the hand piece. This information will be shown on the display. As soon as a step changes, the left-hand time symbol is filled again and runs out completely for each step.
20 Total time	The time bar shows you the total treatment time. This fills up during treatment and shows you the time remaining.
22 Stop button	This symbol enables you to stop the treatment. If you wish to return to the main menu or call up information, the treatment must first be stopped.
23 Start/pause button	This symbol enables you to start and pause the treatment. If you wish to return to the main menu or call up information, the treatment must first be stopped.
24 Time per step	Treatment steps "Step 1, 2 or 3" have a preset time specification which can be seen via this symbol. The circle fills with colour during the step. Once the time expires, the LED ring on the ultrasound hand piece will, if necessary, inform you that you need to change the ultrasound hand piece.

Installation

Ultrasound treatment device

Setting up the ultrasound treatment device

Please observe the notes to avoid damaging the ultrasound treatment device.

NOTE

DAMAGE TO THE ULTRASOUND TREATMENT DEVICE

The ultrasound treatment device must be positioned in a suitable place to avoid being damaged.

- Set the ultrasound treatment device up on a level, firm and heat-resistant floor surface.
- Do not place the ultrasound treatment device on a hand towel or blanket.
- Ensure that the ventilation openings on the ultrasound treatment device are unobstructed and not covered.

Connecting the ultrasound treatment device to the power supply

To connect the ultrasound treatment device to the mains power supply:

1. Plug one end of the power cable into the socket at the rear of the ultrasound treatment device.
2. Plug the other end of the power cable into a power socket.

The device is connected to the power supply.



Fig. 6: Connection of mains plug and USB port

Adjusting the angle of the ultrasound treatment device



INFO

The angle of the ultrasound treatment device can be set individually in two different positions.

To adjust the angle of the ultrasound treatment device:

1. Pull the small wheel on the rear of the ultrasound treatment device out (cf. Fig. 9).
2. Set the desired angle.
3. Let the wheel snap into place. The desired angle is selected.

The angle is now set.



Fig. 7: Angle position 1



Fig. 8: Angle position 2



Fig. 9: Wheel for adjusting the angle

Ultrasound hand piece

INFO

There are two connections on the ultrasound treatment device for the ultrasound hand pieces. It does not matter which connection you use. The system automatically recognises the size of the ultrasound hand piece.

Connecting the ultrasound hand piece

To connect the ultrasound hand piece:

1. Connect the ultrasound hand piece with the notch to the connection socket on the ultrasound treatment device.
2. Ensure that the ultrasound hand piece connection fits correctly.
3. Tighten the nut to the connection. The nut is located on the end of the cable.

The ultrasound hand piece is connected.



Fig.10: Connection to the ultrasound hand piece with notch (inner)

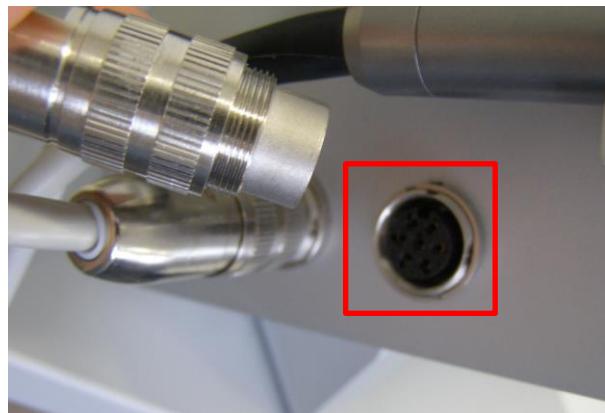


Fig. 11: The ultrasound hand piece connection socket on the ultrasound treatment device

Controls

INFO

A transmission aid is always required to transmit an ultrasound wave effectively into the skin and tissue.

The best transmission aids are the gels developed specially for the treatment or specially adapted bio-cellulose masks.

This overcomes the difference in density between the ultrasound head and the skin.

Transmission is therefore achieved without any significant loss through absorption, dispersion or reflection. Furthermore the ultrasound gel provides a good lubricating layer to ensure a pleasant treatment.

Ensure that there is always enough gel on the skin.

Ultrasound treatment device

INFO

The ultrasound treatment device may take 1-2 minutes to power up; please be patient.

Switching the ultrasound treatment device on

To switch the ultrasound treatment device on:

1. Press the on/off button **2** at the top of the ultrasound treatment device. A blue LED ring comes on (cf. Fig. 12).
2. Confirm the registration of the app so that the device software can be started.
3. A start check is then initiated with a hand piece test.

As soon as the LED ring on the hand piece stops flashing, the hand piece test is complete. You can start the main menu. The ultrasound treatment device is switched on.



Fig. 12: LED ring is lit blue when switched on

Problems during the hand piece test

**INFO**

If an error message appears after complying with these instructions, please contact customer service (tel. +49721-9770-666).

If a problem should arise during the hand piece test, the message “Hand piece error” or “Temperature sensor faulty” is displayed.

Please proceed as follows:

1. Press the on/off button **2** on the ultrasound treatment device to switch it off.
2. Switch the ultrasound treatment device on again.
3. Confirm the registration of the app so that the device software can be started.
4. A start check is then initiated with a hand piece test.

As soon as the LED ring on the hand piece stops flashing, the hand piece test is complete. You can start the main menu. The ultrasound treatment device is switched on and ready of use.

Switching the ultrasound treatment device off

— Press the on/off button **2** on the ultrasound treatment device.

The ultrasound treatment device is switched off.

Menu navigation

**INFO**

The display can also be operated with thin gloves.

Please ensure that you only operate the display with dry hands or gloves.

The ultrasound treatment device is equipped with a capacitive display which only reacts to directive input assistance, such as a finger.

Multi-touch is also possible, e.g. if you need to enlarge a text.

Ultrasound hand piece

Controlling the ultrasound hand piece



INFO

Move the ultrasound head continuously across the surface of the skin and never treat a specific point for a long time without moving (static ultrasound exposure), as this may cause tissue damage.

For facial treatments, use the ultrasound hand piece in slow circular or spiral movements in the direction of lymph drainage along the lymphatic pathways.

Remember to ask the person being treated about the heat sensation and if there is too much heat, move the ultrasound hand piece more quickly.

Treatment programmes in the main menu



INFO

The ultrasound hand piece must be in contact with the skin to be able to treat a person.

The ultrasound treatment device indicates that there is no contact with the skin by displaying a message stating “Skin contact lost” (cf. Fig. 13).

The treatment is interrupted if no skin contact is established or if there is no reaction to the message.

To establish skin contact:

1. Ensure that you are working with the correct ultrasound hand piece.
2. Check if enough contact gel has been applied.
3. If you wish to remove the display, press your finger on the background of the window.
4. Continue the treatment.

Skin contact is established and the treatment can be started or continued.

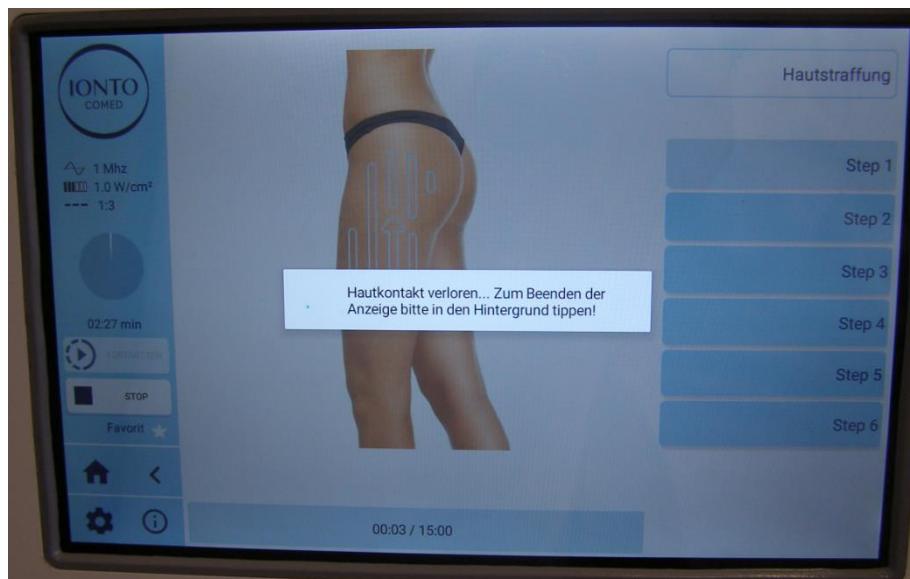


Fig. 13: Re-establish skin contact

For beginners

INFO

The “Face” and “Body” options are listed under programmes.

Facial treatment zone

INFO

The facial programmes are divided into 1-3 steps so that one side of the face is always treated first, then the other.

During a step, the animations will prompt you to change the side of the face you are treating.

To start the treatment in the facial treatment zone:

1. Press on the **13** programme in the main menu.
2. Select the facial treatment zone (cf. Fig. 14).
3. Select the corresponding face programme. You can select a suitable treatment programme according to the skin type or indication (cf. Fig. 15).
4. Press the face programme you have selected. The treatment is opened.
5. Start the treatment by pressing the start/pause button **23** (cf. Fig. 16).

The treatment starts.

Controls



Fig. 14: Select the facial treatment zone

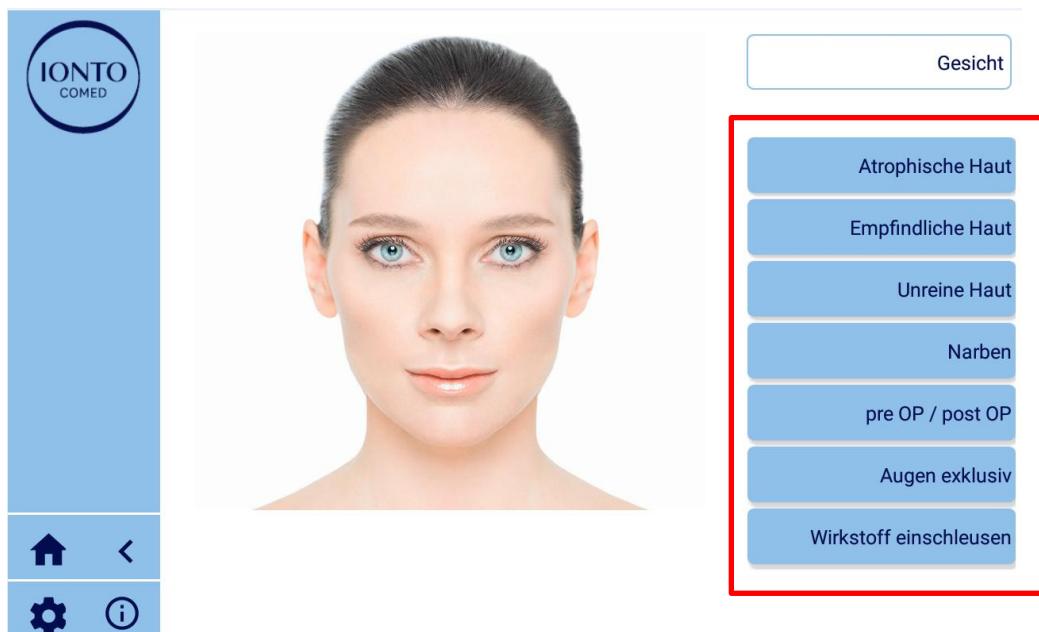


Fig. 15: Select the type of face treatment or skin type

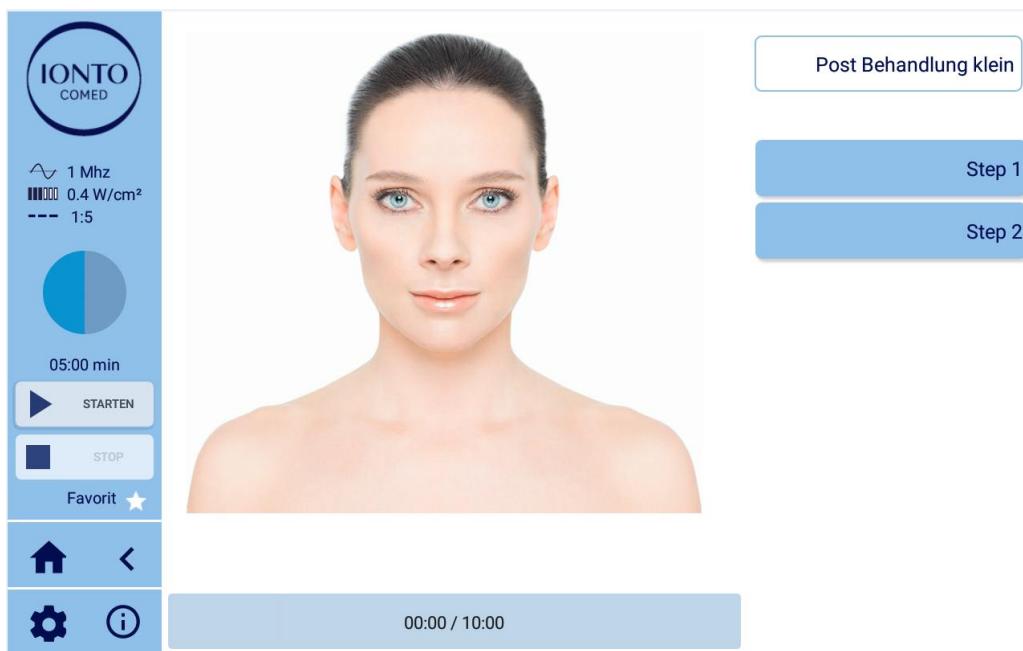


Fig. 16: Start the face treatment

Bodily treatment zone

ⓘ INFO

The body programmes are divided into 6 steps so that one leg is always treated first, then the other.

Between steps 3 and 4, the animation will prompt you to change leg.

To start the treatment in the bodily treatment zones:

1. Press “Programmes” **13** in the main menu.
2. Select the bodily treatment zone (cf. Fig. 17).
3. Select the corresponding body programme (cf. Fig. 18).
4. Press the body programme you have selected. The treatment is opened.
5. Start the treatment by pressing the start/pause button **23** (cf. Fig. 19).

The treatment starts.

Controls



Fig. 17: Select the bodily treatment zone



Fig. 18: Select the body programme



Fig. 19: Start the body treatment

For experienced users



INFO All 30 programmes will be listed.

Selecting the type of treatment or skin type and treatment

To select the type of treatment or skin type and treatment:

1. Press the Programme+ button **14** in the main menu. Scroll up or down using the arrows.
2. Select the relevant face or body programme (cf. Fig. 20).
3. Start the treatment by pressing the start/pause button **23**.

The treatment starts.

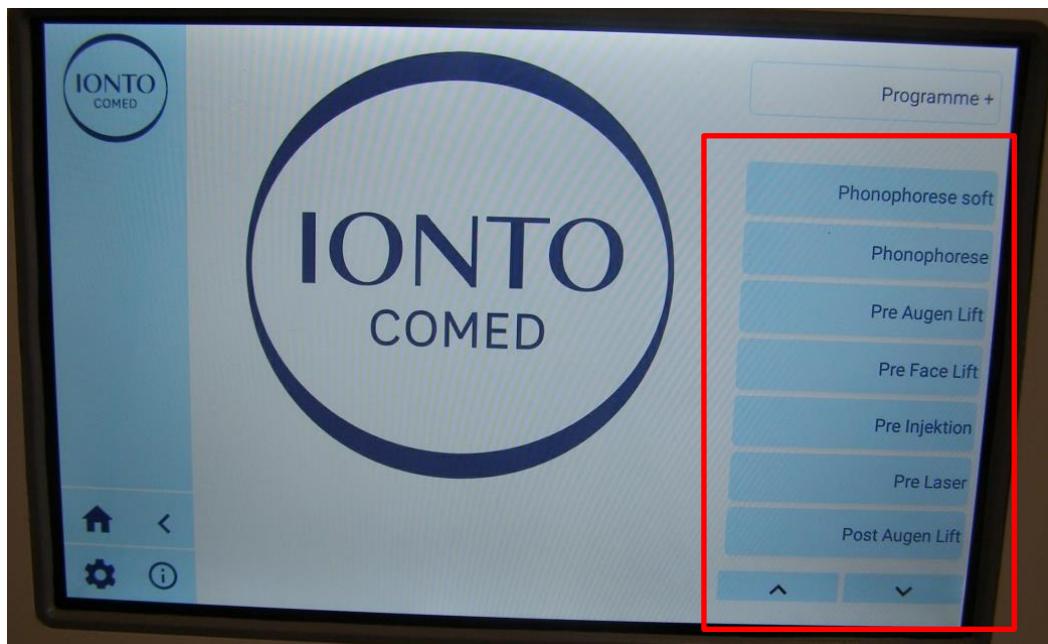


Fig. 20: Select type of treatment or skin type and treatment

Treatment programmes and parameters

ⓘ INFO

The parameters set are based on the analysis of studies and application tests.

You can find a detailed explanation of the parameters and the operating principle of ultrasound in the “Treatment instructions” and “Explaining ultrasound” documents as well as in the ultrasound treatment device itself under “Information”.

The treatment programmes are preset.

The following treatments are preset with the relevant parameters:

- Parameter: Face programmes
- Parameter: pre/post OP (aesthetic/plastic operations in the facial zones)
- Parameter: Body programmes

Parameter: Face programmes

Programme name	Application/aim	Step	Time per side of the face / total (min.)	Mode	Frequency [MHz]	Intensity [W/cm ²]
Post-treatment small	Sensitive skin, slight redness after microneedling or microdermabrasion	Step 1	2 x 2.5 / 5	1:5	1	0.4
		Step 2	2 x 2.5 / 5	1:5	1	0.4
Post-treatment small soft	Highly sensitive skin, severe redness after microneedling or microdermabrasion	Step 1	2 x 2.5 / 5	1:10	1	0.3
		Step 2	2 x 2.5 / 5	1:5	1	0.3
Lift soft	Ageing skin with labile vessels: rosacea and telangiectasias	Step 1	2 x 2.5 / 5	1:3	1	0.3
		Step 2	2 x 2.5 / 5	1:3	3	0.4
		Step 3	2 x 5 / 10	1:3	10	0.6
Lift	Ageing skin, lines and wrinkles for normal skin, loss of elasticity, collagen reduction	Step 1	2 x 2.5 / 5	Cont.	1	0.3
		Step 2	2 x 2.5 / 5	Cont.	3	0.4
		Step 3	2 x 5 / 10	Cont.	10	0.8
Lift +	Skin ageing and major elasticity loss, sagging, contour loss, insensitive skin, sun-damaged skin, epidermal thickening	Step 1	2 x 2.5 / 5	Cont.	1	0.3
		Step 2	2 x 2.5 / 5	Cont.	3	0.4
		Step 3	2 x 5 / 10	Cont.	10	0.9
Skin with blemishes soft	Skin with blemishes, shiny, oily skin, young skin with blemishes, comedos, papules and pimples	Step 1	2 x 2.5 / 5	Cont.	1	0.3
		Step 2	2 x 2.5 / 5	1:3	3	0.4
		Step 3	2 x 5 / 10	1:3	10	0.5
Skin with blemishes	Ageing skin with blemishes, shiny,	Step 1	2 x 2.5 / 5	Cont.	1	0.3

Controls

	oily skin with tendency to blemishes, skin requiring regeneration, enlarged pores	Step 2	2 x 2.5 / 5	1:3	3	0.4
		Step 3	2 x 5 / 10	1:3	10	0.6
Men's skin	Shiny, oily skin with tendency to blemishes, epidermal thickening, skin requiring regeneration, particularly for men's skin	Step 1	2 x 2.5 / 5	Cont.	1	0.3
		Step 2	2 x 2.5 / 5	1:3	3	0.4
		Step 3	2 x 5 / 10	1:3	10	0.6
Sensitive skin soft	Skin with labile vessels with tendency to rosecea and telangiectasias, quickly appearing redness	Step 1	2 x 2.5 / 5	1:3	1	0.4
		Step 2	2 x 3.75 / 7.5	1:5	3	0.5
		Step 3	2 x 3.75 / 7.5	1:5	10	0.5
Sensitive skin	Skin with tendency to irritation, light rosecea and telangiectasias	Step 1	2 x 2.5 / 5	1:3	1	0.3
		Step 2	2 x 2.5 / 5	1:3	3	0.4
		Step 3	2 x 5 / 10	1:3	10	0.5
Scars	Treatment of scar tissue, treatment time per scar/region for acne scars	Step 1	3	Cont.	1	0.3
		Step 2	3	Cont.	3	0.4
		Step 3	4	Cont.	10	0.9
Throat and décolletage treatment	Throat and décolletage	Step 1	5	1:3	3	0.2
		Step 2	10	Cont.	10	0.5
Expression lines only	Periorbital wrinkles and lines or preparation for invasive surgery	Step 1	2 x 1 / 2	1:10	1	0.2
		Step 2	2 x 1.5 / 3	1: 5	3	0.5
		Step 3	2 x 1.5 / 3	1:3	10	0.1
Lips only	Perioral lip wrinkles	Step 1	5 / 5	1:3	3	0.4

		Step 2	5 / 5	Cont.	10	0.6
Phonophores is soft	Penetration of active substances for sensitive skin with labile vessels	Step 1	2 x 5 / 10	1:5	1	0.4
Phonophores is	Penetration of serum for normal skin	Step 1	2 x 5 / 10	Cont.	1	0.3

Parameter: pre/post OP (aesthetic/plastic operations in the facial zones)

Programme name	Application	Step	Time per side of the face / total (min.)	Mode	Frequency [MHz]	Intensity [W/cm ²]
Pre eye lift	Pre eye lift, periorbital wrinkles and lines	Step 1	2 x 1 / 2	1:10	1	0.2
		Step 2	2 x 1.5 / 3	1: 5	3	0.2
		Step 3	2 x 1.5 / 3	1:3	10	0.1
Pre face lift	Pre face lift for lymph activation	Step 1	2 x 2.5 / 5	Cont.	1	0.3
		Step 2	2 x 5 / 10	Cont.	3	0.5
		Step 3	2 x 5 / 10	Cont.	10	0.8
Pre injection	Pre injection, loosening the tissue for improved filler distribution	Step 1	2 x 5 / 5	Cont.	1	0.3
		Step 2	2 x 5 / 10	Cont.	3	0.5
		Step 3	2 x 5 / 10	Cont.	10	0.8
Pre laser	Improved skin quality	Step 1	2 x 2.5 / 5	1:3	1	0.3
		Step 2	2 x 2.5 / 5	1:3	3	0.4
		Step 3	2 x 5 / 10	1:3	10	0.5
Post eye lift	Post op	Step 1	2 x 1.5 / 3	1:3	1	0.3
		Step 2	2 x 1.5 / 3	1:3	3	0.2
		Step 3	2 x 2 / 4	1:5	10	0.2
Post face lift	Post op	Step 1	2 x 2.5 / 5	Cont.	1	0.2
		Step 2	2 x 2.5 / 5	1:5	3	0.3

		Step 3	2 x 5 / 10	1:5	10	0.5
Post laser	Post laser	Step 1	2 x 2.5 / 5	1:5	1	0.3
		Step 2	2 x 2.5 / 5	1:5	3	0.4
		Step 3	2 x 5 / 10	1:5	10	0.5

Parameter: Body programme

Programme name	Application	Step	Time per side of the face / total (min.)	Mode	Frequency [MHz]	Intensity [W/cm ²]
Striae	Stretch marks	Step 1	5	Cont.	1	0.5
		Step 2	5	Cont.	3	0.5
		Step 3	5	Cont.	10	0.5
Cellulite	Cellulite level 1--3, insensitive vessels, lymph activation, smooth skin surface, tightening of connective tissue	Step 1	5 / 5	Cont.	1	2.0
		Step 2	5 / 5	Cont.	3	1.5
		Step 3	5 / 5	Cont.	10	1.0
Cellulite soft	Cellulite level 1--3, for skin with labile vessels, severely sagging connective tissue and tendency to visible, blue-red vessels	Step 1	5 / 5	1:3	1	1.7
		Step 2	5 / 5	1:3	3	1.5
		Step 3	5 / 5	1:3	10	1.2
Skin tightening	Tightening problem body zones, normal vessels, lymph activation	Step 1	5 / 5	1:3	1	1.0
		Step 2	5 / 5	1:3	3	1.5
		Step 3	5 / 5	Cont.	10	1.0
Muscle relax	Tension, hardening of muscles, muscle relaxation	Step 1	5	Cont.	1	0.8
Pre lipo	Pre liposuction, support of optimal lymph flow, loosening fatty tissue	Step 1	6	Cont.	1	2.0
		Step 2	6	Cont.	3	1.5
		Step 3	3	Cont.	10	1.0
		Step 4	6	Cont.	1	2.0
		Step 5	6	Cont.	3	1.5

		Step 6	3	Cont.	10	1.0
Post lipo	Post liposuction, reduction of swelling, bruises and feeling tightness	Step 1	5	Cont.	1	1.5
		Step 2	5	Cont.	3	1.0
		Step 3	5	Cont.	10	0.8
		Step 4	5	Cont.	1	1.5
		Step 5	5	Cont.	3	1.0
		Step 6	5	Cont.	10	0.8

Treatment animations

Face

INFO

At the start and end of a treatment of one side of the face, the lymphs should always be opened laterally.

The programme images, for example, show an animation of the zones and treatment sides. During treatment, the shading changes from one side of the face to the other.

An acoustic signal informs you when it is time to change the side of the face. We recommend performing the final treatment step in a gentle movement before changing sides of the face.



Fig. 21: Animation of the left-hand zone and treatment side



Fig. 22: Animation of the right-hand zone and treatment side

Short programmes

INFO

The short programmes include smaller programmes with shorter treatment times.

Pre/post OP programmes

INFO

Discuss the treatment with the attending physician beforehand.

The pre/post OP face programmes have been developed for pre-op and post-op care in the case of plastic/aesthetic operations.

Body

INFO

The body programmes are all divided into 6 steps.

The programme images of the body show, for example, an animation of the zones and treatment sides. The sides of the body are treated on both sides, one after the other.

Leg treatment

INFO

Please note that the body programmes have stronger intensities and that the ultrasound hand pieces must be moved across the skin more quickly than in the face programmes due to the heat accumulation.



Fig. 23: Animation of the right-hand zone and treatment side



Fig. 24: Animation of the left-hand zone and treatment side

Muscle relax treatment



INFO

With this programme, do not apply treatment directly on top of the bones, and only in the trapezius muscle zone.

The programme image shows you which zone you can treat.

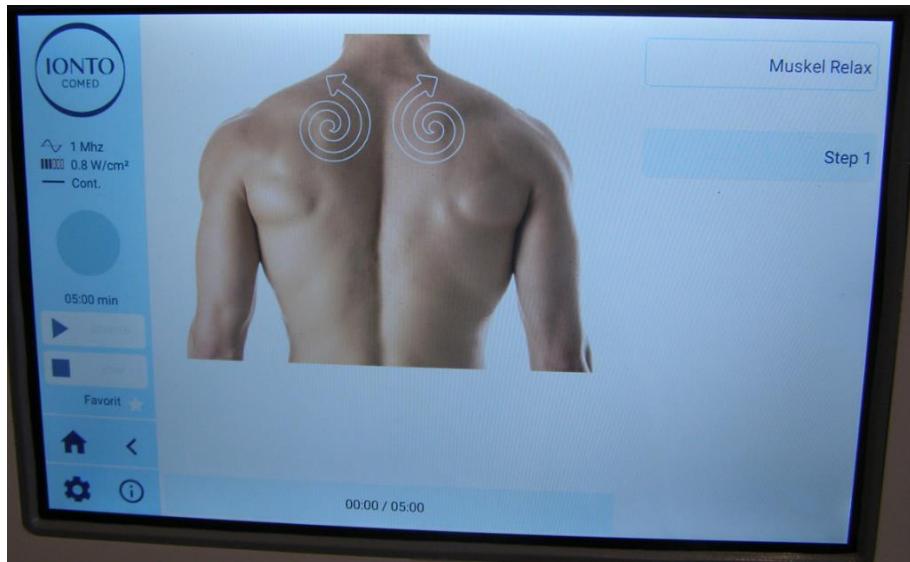


Fig. 25: Example: muscle relax treatment zone

Pre/post liposuction treatment



INFO

Please discuss with the surgeon or attending physician in which zone the liposuction is carried out and treat the corresponding zone.

The programme images shows an animation of the treatment sides.

- Treat both sides of the body within the treatment time.
- Please ensure that you move the ultrasound hand piece more quickly due to the increased intensity levels.



Fig. 26: Animation of the treatment sides

Meaning of the parameter symbols

ⓘ INFO

The symbols in the left-hand section of the screen represent different parameters which affect the treatment.

► Frequency

Value

1 MHz

3 MHz

10 MHz

► Mode

Mode	Meaning
1:3	Within a period of 10 milliseconds: 3.3 ms ultrasound: 6.7 ms pause
1:5	Within a period of 10 milliseconds: 2 ms ultrasound: 8 ms pause
1:10	Within a period of 10 milliseconds: 1 ms ultrasound: 9 ms pause
cont.	Continuous ultrasound

► Intensity

Value
0.1 W/cm ²
2.0 W/cm ²

► Treatment time

Treatment zone	Length of the treatment programme
Max. face	25 minutes
Max. body	30 minutes

Favourites (optional)

ⓘ INFO

Frequently used and favourite treatment programmes can be saved as favourites.
This provides you with quicker access to the programmes.
Favourites can be deleted at any time.

There are two methods of recognising the favourites programmed.

- When you select the treatment programmes, favourite treatment programmes are followed by a blue star (cf. Fig. 27).
- The main menu contains a “Favourites” **17** element. All favourites programmed are stored here ready to be called up (cf. Fig. 28).

Setting favourites

The favourites programmed can be consulted and called up via the “Favourites” menu item.

To programme favourites:

1. Select a treatment programme. The treatment appears on the display.
2. Press the white star in the left-hand menu bar **21**. The star turns blue.

The favourite is programmed.

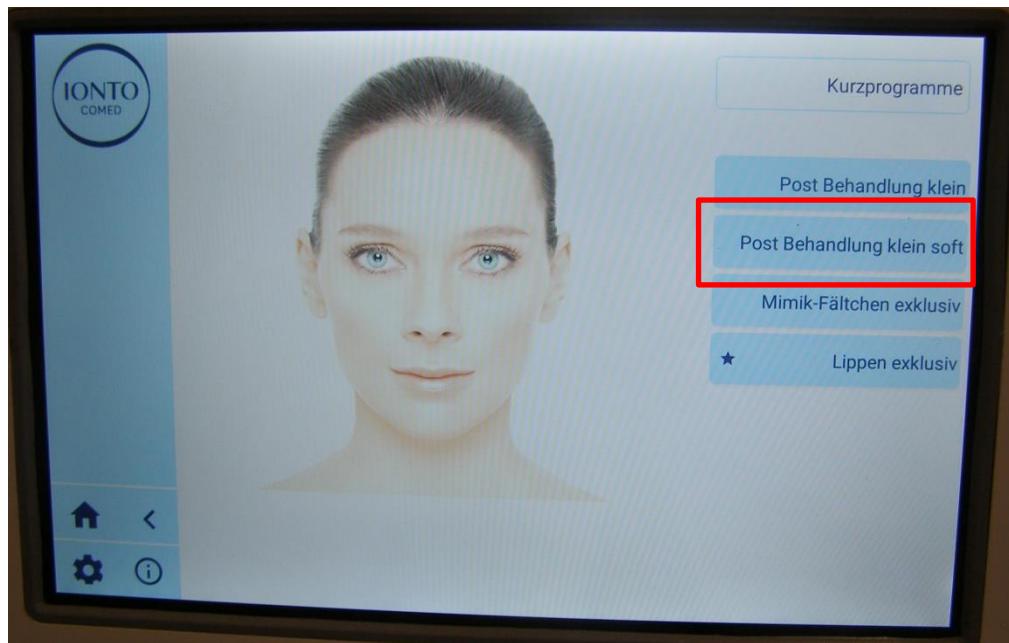


Fig. 27: programmed favourite



Fig. 28: programmed favourites are stored under "Favourites"

Deleting favourites

- In the “Favourites” control element

To delete a favourite:

1. Press the “Favourites” control element **17**.
2. Press the treatment programme to be deleted. The treatment appears on the display.
3. Press on the blue star in the left-hand menu bar. The star turns white.

The favourite is no longer programmed.

- In the treatment programmes

To delete a favourite:

1. Press the “Programmes” **13** or “Programme+” **14** control element.
2. Select the treatment zone in the programme **13** under which you programmed the favourite.
3. Select the treatment area in the Programme+ **14** under which you programmed the favourite.
4. Press the treatment programme to be deleted. The treatment appears on the display.
5. Press on the blue star in the left-hand menu bar. The star turns white.

The favourite is no longer programmed.

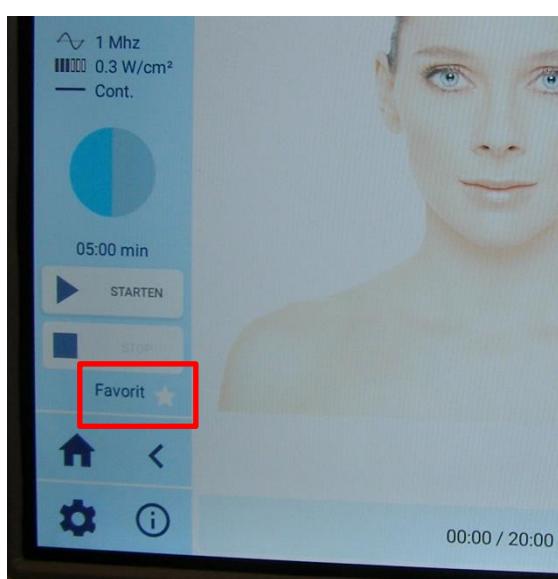


Fig. 29: Favourite deleted when a white star is displayed

Ultrasound parameters



INFO

The effect and penetration depth of the ultrasound are determined by the frequency, intensity, type of ultrasound (mode), treatment time and type of tissue to be treated.

Frequency

Hz/MHz	Oscillations per second
1 Hz	1 oscillation per second
1 MHz	1 million oscillations per second
3 MHz	3 million oscillations per second
10 MHz	10 million oscillations per second



INFO

The frequency of the ultrasonic waves determines the wavelength and depth of penetration as a so-called half-value penetration depth (distance at which the wave intensity still retains 50% of the energy activated).

The higher the frequency, the smaller the distance between waves and the lower the half-value penetration depth, and vice versa.

During treatment at 10 MHz, the sound waves are closer together than during treatment at 1 MHz and thus the effect in the upper skin layers is more intensive.

MHz	Wavelength/ Half-value penetration depth
1 MHz	Wavelength 1.5 mm, approx. 3 cm half-value penetration depth
3 MHz	Wavelength 0.5 mm, approx. 1 cm half-value penetration depth
10 MHz	Wavelength 0.15 mm, approx. 0.3 cm half-value penetration depth

Intensity (acoustic power)

 **INFO**

Intensity is the acoustic power per surface unit that penetrates an area, or the energy applied per time and per surface unit [W/cm^2].

The higher the intensity, the more intensively the heat is developed in the tissue.

Acoustic power	Energy per time and per surface unit [W/cm^2]
Low	0.1 – 0.3 W/cm^2
Medium	0.4 – 0.8 W/cm^2
High	0.8 – 2.0 W/cm^2

Mode

 **INFO**

The ultrasound wave that radiates from the ultrasound hand piece can be permanent (continuous sound) or periodic (pulse sound). This is determined by the mode.

► Continuous sound

Ultrasound waves are continuously emitted.

- Intense thermal effect
- Mode: continuous (cont.)

► Pulse sound

The ultrasound waves are emitted as periodic pulses.

- Reduced thermal effects
- Mechanical and biochemical ultrasound effects are not diminished
- Modes: 1:3 / 1:5 / 1:10

Time

 **INFO**

The maximum time per treatment zone should not be exceeded. Treatments can nevertheless be shortened. The treatment steps can also be controlled and implemented individually.

Treatment

Treatment procedure

Starting the treatment



INFO

The time only begins to move forward once you have placed the treatment head on the treatment zone and established skin contact.

To start a treatment:

1. Check that you have selected a programme.
2. Apply the ultrasound gel to the area of skin on which you wish to conduct the treatment.
3. Push the start/pause button **23**.

The treatment starts.

Pausing the treatment



INFO

During an ongoing treatment, you can stop the treatment time.

To pause a treatment:

- Press the start/pause button **23**. The treatment is paused and the treatment time stops.

The treatment is paused.

- Press the start/pause button again **23**. The word “Continue” appears on the button.

The treatment continues. The timer starts to count down again.

Ending the treatment



INFO

You can end an ongoing treatment completely.

To end a treatment:

1. Press the stop button **18**.
2. When the message “Do you really want to stop the treatment” appears, confirm with “Yes” to end the current treatment.

The treatment is now ended.

—When the message “Do you really want to stop the treatment” appears, press “No” to continue the treatment.

Skin contact recognition

INFO

We recommend that you activate the skin contact recognition in order to ensure better control of the sound emission.

Switching the skin contact recognition on

To switch the skin contact recognition on:



1. Press the “Settings” control in the left-hand menu bar or press “Settings”
2. Tick the “Skin contact” box.

15

Sound is now only emitted if there is full contact with the contact gel.

The skin contact recognition function is switched on.

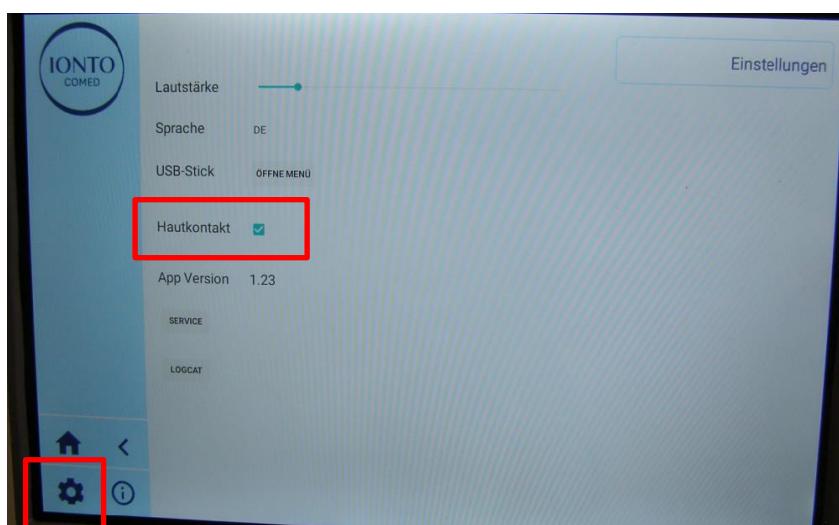


Fig. 30: Box ticked

Switching the skin contact recognition off

To switch the skin contact recognition off:



1. Press the “Settings” control  in the left-hand menu bar or press “Settings” 15
2. Deselect the “Skin contact” box.

During a programme, the sound will continue to be emitted. Skin contact recognition is now switched off.

Device settings

Sound and volume

Setting the sound and volume for general signal tones



INFO

You can determine whether the ultrasound treatment device emits a sound every time a button is pressed.

You can also set the volume of the signal.

To set the sound and volume:



1. Press the “Settings” control in the left-hand menu bar or press “Settings” in the programme.
2. Drag your finger over the touchscreen. Moving to the left reduces the volume and moving to the right increases the volume.
3. Drag the bar to the left using your finger if you want to switch the sound off completely.

15

The sound and volume are set for general signal tones.

Screen language

Setting the screen language



INFO

You can select either English or German as the language displayed on the screen.

To set the screen language:



1. Press the “Settings” control in the left-hand menu bar or press “Settings” in the programme.
2. Press the “Language” button to select the desired language.

15

The screen language is now set.

Cleaning and care

Please observe the safety instructions and notes to avoid personal injury and damage to the ultrasound treatment device.

WARNING

RISK OF ELECTRIC SHOCK

This can cause fatal injuries.

- *Before beginning to clean the bed, remove the mains plug from the socket.*
- *Prevent any water from entering the casing or the controls.*

NOTE

DAMAGE TO THE ULTRASOUND HAND PIECE

The ultrasound hand piece will be damaged by incorrect or irregular cleaning and maintenance.

- *Do not place the ultrasound hand piece in an ultrasound bath.*
- *Never immerse the ultrasound hand piece in liquid.*
- *Disinfect the shiny surface of the ultrasound hand piece using a mild disinfectant after every use on a customer.*

Ultrasound treatment device

Cleaning the ultrasound treatment device

To clean the ultrasound treatment device:

1. Spray a mild disinfectant onto a soft, dry cloth.
2. Rub the ultrasound treatment device with the dampened cloth.
3. Ensure that no liquid seeps inside the housing.
4. Rub the ultrasound treatment device dry using a soft cloth.

The ultrasound treatment device is now clean.

Ultrasound hand piece



INFO

To clean the ultrasound hand piece, we recommend disinfectant Bacillol Tissues (art. no. 9220.502). You can order the disinfectant from us.

Cleaning the ultrasound hand piece

To clean the ultrasound hand piece:

1. Use a disinfectant wipe or a cloth that you have sprayed with disinfectant.
2. Wipe the entire ultrasound hand piece.
3. Rub the ultrasound hand piece dry using a soft cloth.

The ultrasound hand piece is now clean.

Regular maintenance and inspections

Observe the safety instructions to avoid personal risks and injuries.



RISK OF ELECTRIC SHOCK

This can cause fatal injuries.

- *Switch the ultrasound treatment device off.*
- *Disconnect the mains plug.*

Software update



INFO

Please contact our customer service (tel.: +49721-9770-666) to receive further information.

To update the software:

1. Contact our customer service.
2. Press the on/off button **2** to switch the ultrasound treatment device on.
3. Wait until the hand piece test is complete.
4. The app starts.
5. Insert the USB stick with the updated app into the port on the rear of the ultrasound treatment device (cf. Fig. 31 and Fig. 32). The USB stick is recognised.
6. Press “Update application.”
7. The app updates itself.
8. Confirm the app.
9. Press “Install”. The software update is implemented.
10. Wait a few minutes until the software update is complete.
11. Check the app version via the settings. You can recognise the update by the number written after it (cf. Fig. 33).

The software update has been successfully completed.

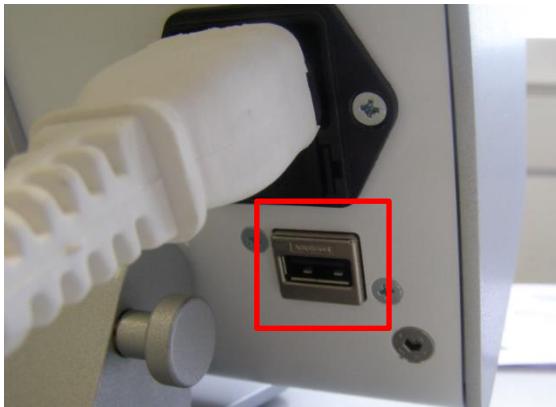


Fig. 31: USB port at the rear of the ultrasound treatment device



Fig. 32: USB stick in the corresponding port

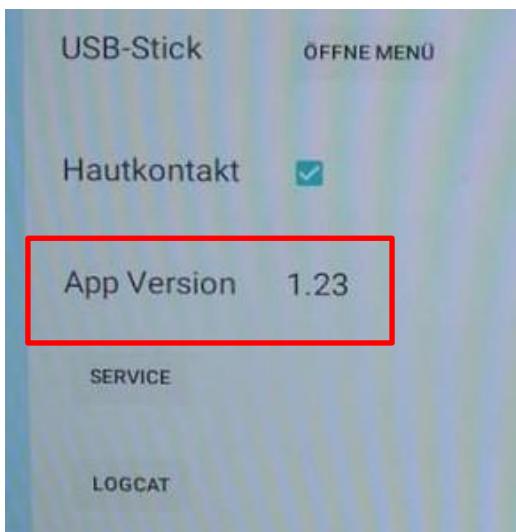


Fig. 33: recognise the current app version

Copying the app version onto a USB stick

To copy the app version onto a USB stick:

1. Contact our customer service.
2. Press the on/off button **2** to switch the ultrasound treatment device on.
3. Wait until the hand piece test is complete.
4. The app starts.
5. Insert the USB stick into the port at the rear of the ultrasound treatment device. The USB stick is recognised.
6. Press “Copy app version onto USB stick”.
7. Press “Install”. The new app version is copied.
8. Wait a few minutes until the app version is on the USB stick.

The app version has successfully been copied onto a USB stick.

Starting the app

 **INFO**

The app needs approx. 2 minutes to be restarted.
Please be patient.

 **INFO**

If an error message is displayed, check the connections of both ultrasound hand pieces and, if necessary, contact our customer service (tel.: +49721-9770-666).

To start the app:

1. Press the start/stop button  to switch the ultrasound treatment device on.
2. The app starts.
3. Confirm access to the app.
4. Press “ALWAYS”.
5. The confirm access to the app.
6. Press “OK”.
7. Wait about 60 seconds until the start check is complete.
8. Wait about 60 seconds until the hand piece test is complete. During the hand piece test, the ultrasound hand piece connection is checked by the ultrasound treatment device.
9. The LED rings on the ultrasound hand pieces are lit one after another.

The app starts. Following a successful start check and hand piece test, the menu field can be operated or the ultrasound treatment device can be switched off.

Transport / storage / operating conditions

Operating temperature:

+10°C to +40°C

Relative air humidity:

max. 90%, non-condensing

Transport temperature:

+25°C to +40°C

To avoid the formation of condensation, abrupt changes of temperature should be avoided. Wait until the device has acclimatised to the ambient temperature before using it.

Only transport in the manufacturer's original packaging.

Disposal

Keep the original packaging for use when transporting the device.

Dispose of the device itself, packaging and accessories in an environmentally-friendly manner in the appropriate disposal points.

All electrical and electronic devices should be disposed of separately from general household waste.



This crossed-out wheeled bin symbol on the product means a product is covered by European Directive 2002/96/EC and should not be mixed with general household waste. A separate collection system exists for these products.

The correct disposal and separate collection of your old appliance will help prevent potential negative consequences for the environment and human health. It is a precondition for reuse and recycling of used electrical and electronic equipment.

Fault finding and solutions

Fault	Cause	Solution
The ultrasound treatment device does not function.	Mains cable not correctly connected.	Check connection of the mains cable. The plug must be firmly inserted.
	The power button is not switched on.	Switch the power button on.
The ultrasound treatment device displays the error message “No hand piece connected! Please connect a hand piece.”	No ultrasound hand piece is connected.	Connect an ultrasound hand piece.
	The ultrasound hand piece is not correctly connected.	Check the ultrasound hand piece connection. The notch must fit into the connection.
	The ultrasound hand piece is faulty.	Contact our customer service department.
The LED ring on the ultrasound hand piece is flashing very quickly.	The ultrasound hand piece is overheating.	Stop the treatment. Wait until the LED ring is not flashing as quickly. Start the treatment again.

If any further faults or difficulties should occur, please contact our customer service department (tel.: +49721-9770-666).

Scope of delivery

Number Article number Article name

1	8438	IONTO-SONO INTENSE device
1	8421.100	1 MHz and 3 MHz ultrasound head, 2.5 cm ²
1	8438.001	3 MHz and 10 MHz ultrasound head, 2 cm ²
1	8422.016	SONO basic contact gel, 200 ml
1	1800. A011	25 customer ultrasound factsheets.

Technical data

Article number:	8438
Mains power supply:	110V -240V AC
Power consumption:	80 W
Network frequency:	50 Hz-60 Hz
Fuse:	2 x 1.6 AT
Protection class:	I
Dimensions (W/D/H) in mm:	420 x 260 x 265
Net weight without hand piece:	6.5 kg
Ambient temperature	+10°C to +40°C
Transport temperature	-20°C to +40°C
Relative air humidity:	90%
Hand piece, 2 cm ² :	<p>Active ultrasound surface: 2 cm²</p> <p>Max. ultrasound intensity: at 3 MHz: 1.0 W/cm²</p> <p>Nominal frequency 1: at 10 MHz: 1.0 W/cm²</p> <p>Nominal frequency 2: 3,000 kHz (+/- 10 %)</p> <p>10,000 kHz (+/- 10 %)</p>
Modes:	<p>cont. Continuous</p> <p>1:10</p> <p>1:5</p> <p>1:3</p>
Weight:	320 g with cable
Cable length:	2 m
Material for ultrasound body:	Titanium

Technical data

Hand piece, 2.5 cm ² :	
Active ultrasound surface:	2.5 cm ²
Max. ultrasound intensity:	at 1 MHz: 2.0 W/cm ²
Nominal frequency 1:	at 3 MHz: 1.0 W/cm ²
Nominal frequency 2:	1,000 kHz (+/- 10 %) 3,000 kHz (+/- 10 %)
Modes:	cont. Continuous 1:10 1:5 1:3
Weight:	340 g with cable
Cable length:	2 m
Material for ultrasound body:	Stainless steel

EU declaration of conformity

We hereby declare that the device indicated below complies with the relevant regulations listed below by virtue of its design and construction as well as of the model we have put into use.

Designation: **IONTO-SONO Intense**

ID no.: **8438**

Year of manufacture: **from 15 August 2017**

Complies with the following EU guidelines: **Low-Voltage directive 2014/35/EU**

EMC Directive 2014/30/EU

RoHS-Directive 2011/65/EU

Applicable harmonised standards, in particular:	EN 60335-1:2012	Safety of household electrical appliances – Part 1: General requirements
	EN 55011:2016	Industrial, scientific and medical devices – radio-frequency disturbance characteristics – limits and methods of measurement
	EN 61000-3-2:2014	Electromagnetic compatibility (EMC) - Part 3-2: Limits - Limits for harmonic current emissions (equipment input current ≤ 16 A per phase)
	EN 61000-3-3:2013	Electromagnetic compatibility (EMC) - Part 3-3: Limits - Limitation of voltage changes, voltage fluctuations and flicker
	EN 61000-4-2:2009	Electromagnetic compatibility (EMC) - Part 4-2: Testing and measurement techniques - Electrostatic discharge immunity test
	EN 61000-4-4:2012	Electromagnetic compatibility (EMC) - Part 4-4: Testing and measurement techniques - Electrical fast transient/burst immunity test
	EN 61000-4-5:2014	Electromagnetic compatibility (EMC) - Part 4-5: Testing and measurement techniques. Surge immunity test
	EN 61000-4-6:2014	Electromagnetic compatibility (EMC) - Part 4-6: Testing and measurement techniques - Immunity to conducted disturbances, induced by radio-frequency fields
	EN 61000-4-11:2004	Electromagnetic compatibility (EMC) - Part 4-11: Testing and measurement techniques - Voltage dips, short interruptions and voltage variations immunity tests

EU declaration of conformity

If the device is changed, this declaration is no longer valid.

A German-language version of the operating instructions is available.

Manufacturer/

Authorised representative:

IONTO Health & Beauty GmbH

Greschbachstrasse 3

D-76229 Karlsruhe

Karlsruhe,

18.08.2017

Place

Date

Dipl. Ing. (FH) Gisela Bauch

- Quality management -



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