

TRIMEDEA



Booster for Effective and Fast Learning



Operating Instructions

Thank you for the trust you have placed in us by purchasing this IQ Balancer. These instructions are intended to help you operate the device. Please read these instructions carefully. We hope that our technology will fulfil your expectations.

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2. Glossary

Alpha State	Frequency range in which brain waves of 8-12 Hz can be measured by an EEG, state of relaxation, concentration and heightened alertness
LED	Light-emitting diode that converts current directly into light
Pink Noise	Broadband noise in which all frequencies between 1 and 20,000 Hz are played simultaneously
Sounder	Electrodes for transmitting sound information in the 40,000 to 50,000 Hz range (inaudible range)
Theta State	Frequency range in which brain waves of 3-8 Hz can be measured by an EEG, state of deep relaxation and sleep
Ultrasound	Frequency range (over 16,000 Hz to several MHz) above the sound perception of our ears
<u>/!</u>	WARNINGS are indicated by the symbol on the left. Instructions in connection with WARNINGS must always be followed by the user.

3. Intended Use

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The IQ Balancer generates biocompatible sound signals that can be used to achieve deep physical and mental relaxation after approx. 20 minutes. This state of relaxation is called the alpha state and can be measured using EEG (electroencephalogram) or HRV (heart rate variability). The absorption and storage of information is easier, more relaxed and more effective in this state of relaxation. You can find the most frequently asked questions about the IQ Balancer at **trimedea.com/en/iq-balancer-faq**

FGS accepts no liability for any misuse or misappropriation!

4. Product Description



With the IQ Balancer:

external audio signals or learning content can be perceived, which are modulated as an audio file (.wav or .mp3) in addition to the ultrasound signal, without the ears transmitting the sound to the inner ear. The ultrasound signal is in the range of 40-50 kHz, i.e. 40,000 to 50,000 Hz (vibrations per second). The device can be used as a stand-alone device (without audio content) and with audio content.

Both sounders must be in direct contact with the skin, preferably in areas with no or little hair, for the oscillation circuit (electrical) to work.

Figure 1: IQ Balancer

4.1 Scope of Delivery

- 1 x iQ Balancer appliance
- 1 x sounder 0.5 m with 3.5 mm jack socket
- 1 x USB-C charging cable plus adapter from USB-C to USB-A
- 1 x audio adapter cable from audio 3.5 mm jack to USB-C
- 1 x device bag in colour of your choice



Figure 2: Sounders

4.2 Functions of the IQ Balancer

The device can be used as a stand-alone device (without audio content) and with audio content.

4.2.1 Use as stand-alone, without audio content

Output via sounder with skin contact:

- Ultrasound main/carrier signal: approx. 40-50 kHz
- Ultrasound + pink noise: approx. 1-20,000 Hz
- Automatically integrated biofeedback mechanism

4.2.2 Use with audio content

Output via sounder:

- Ultrasound main/carrier signal: approx. 40-50 kHz
- Ultrasound + pink noise: approx. 1-20,000 Hz (biologically more effective)
- Ultrasound + audio signal
- Ultrasound + pink noise + audio signal
- Integrated biofeedback mechanism

Output via headphone socket:

- Audio content via headphones or audio system
- Audio content plus pink noise via headphones or audio system

4.2.3 Charging the Battery

The internal battery can be charged using the USB-C cable supplied (LED on the left flashes **red**). As soon as the battery is fully charged and the charging cable is removed, the **red** LED next to the the battery goes out. A full charge can take approx. 5 hours. Battery capacity: 2400mAh, charging current: maximum 500mA.



4.2.4 Display

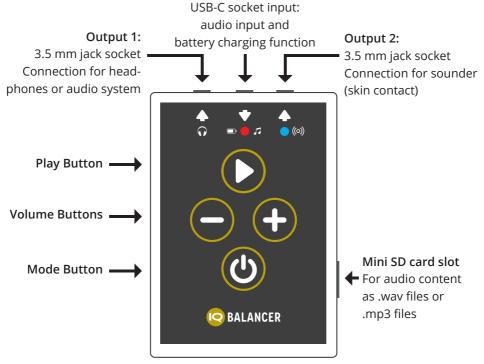


Figure 4: Display with function buttons, outputs and inputs

5. Operating the IQ Balancer

There are three sockets on the top of the device and an SD card slot on the right-hand side (see Figure 4).

From top left to bottom right:

- Output 3.5 mm jack socket: connection for headphones or audio system
- Input USB-C socket: audio input and battery charging function
- Output 3.5 mm jack socket: connection for sound generator (skin contact)
- Mini SD card: audio content as .wav or .mp3 files

The media player integrated in the device is very easy to use: You only need to press the play button with the functions start, pause, next track and stop as well as the play mode "play only the current track" or "play all tracks in sequence".

5.1 Overview of the Most Important Functions

- We have deliberately dispensed with a complicated audio player function with display and playlists.
- Audio content (one or more tracks) from the SD card is not stopped; it is played again and again until the stop function is activated (Random play mode: all tracks in succession).
- If only one of several tracks is to be played and the player is then to stop, the "one track only" play mode must be activated.
- The right-hand output socket is connected to the sounders.
- The sound signals are only transmitted when both sounders are in contact with the skin.
- Use the mode button (o) to select between ultrasound (LED on the right lights up blue) and ultrasound + pink noise (LED on the right lights up green).

Play-Button (



- Press 1x: Start (LED on the left lights up green)
- Press briefly: Pause (LED on left flashes green)
- Press 2x briefly: Next track
- Press and hold: Stop
- Activate play mode "one track only": Skip to the desired track and play (LED on the left lights up green), press the mode button for 3 seconds (confirmation: LED on the left flashes green 3 x)
- Activate play mode "all tracks in sequence": A track is played (LED on left lights up green), press play button for 3 seconds (confirmation: LED on left flashes green 3 x)

Mode Button 🕑



- Long press (2 seconds): Switches the device on and off
- Short press: Switches between ultrasound / ultrasound plus pink noise
 LED on the right lights up blue: Ultrasound signal is activated

 (๑)
 LED on the right lights up green: Ultrasound plus pink noise is activated
 (๑)

Volume Buttons



- Volume control of the sounder signals
- Volume level of the audio signals and pink noise are automatically adjusted

5.2 LED Signals and Functions

Operation without Audio Functions

LED left:

- Red flashes: Battery is empty / charging
- Red: Battery is full, charging cable can be removed

LED right:

- Blue: Ultrasound
- Gren: Ultrasound plus pink noise

Press 1 x mode button (On/Off):

Switch between ultrasound and ultrasound with pink noise

Operation with Audio Functions

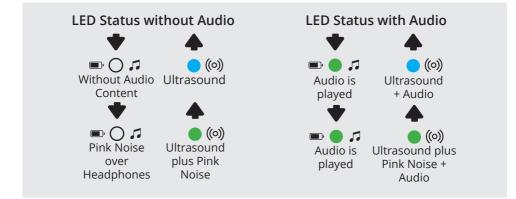
LED left:

- Green: Audio is played
- Green flashes: Audio pause
- No LED light: Audio is stopped
- Red flashes: Battery is empty / charging
- Red: Battery is full, charging cable can be removed

Additional Audio Functions

LED right:

- Blue: Ultrasound
- Green: Ultrasound plus pink noise



5.3 Sounders

Operating the Sounders

Place the two metal plates with the metal side on clean, fat-free and hairless areas of skin, e.g. on the loin, hip bone, forearm, temple, ankle, calf. The ideal combination is on the left front of the hip and the right back of the loin.

Ensure that there is good contact with the skin. Secure the plates to the body, e.g. with a headband, bra, socks or trouser waistband.

Ensure that the sounder plug is correctly inserted into the socket as far as it will go.

When you have finished using the device, remove the jack plug from the sounder and switch the device off.

5.4 Recommendations for Use

Normally we quickly sense what is good for us and what is less so. Sometimes this feeling changes after a certain time, so always pay attention to the feedback and signals from your body and mind.

We recommend using the ultrasound signal in conjunction with pink noise, as this provides the body with a broad frequency spectrum that it can optimally utilize for itself due to resonance principles.

Start with the pure ultrasound signal and switch on the pink noise if you wish (for operation see 5.1). Feel inside yourself to see if it is more pleasant. If not, simply switch it off again.

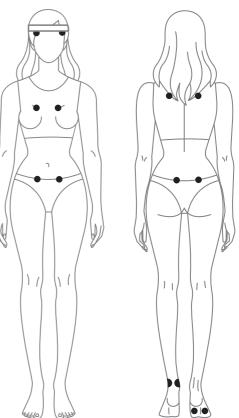


Figure 5: Possible placements of the sounders



5.5. Tips on length of the application

Below you will find our recommendations for application times:

20 Minutes:	For relaxation, stress reduction or physical symptoms
20 - 60 Minutes:	For meditation, short nap / afternoon nap
20 - 180 Minutes:	For lectures for better absorption of knowledge (school, university workshops)
Several hours and overnight:	For learning languages

6. Contraindications and Side Effects

There are no known contraindications or side effects. The application is at the user's own risk and responsibility. The technology has been in use worldwide since 1970. If you are more sensitive, carry out an initial test with a few seconds of skin contact and gradually increase the time to gain your own confidence in the application and physical feedback.

Most doctors or therapists are not familiar with this technology and therefore cannot give you a sensible recommendation. Before a doctor/therapist recommends something they are not familiar with or have no specialized knowledge of, they are more likely to advise against it for liability reasons.

You may experience different sensations when using the IQ Balancer. If these become too unpleasant for you, stop the application and take a break. Listen to your sensations and sensory perceptions. If necessary, you can gradually creep in the application time.

If you have any questions, please do not hesitate to contact us: +49-178 68 79 424

7. General Safety Instructions

Avoid heating the IQ Balancer during operation or storage (max. 40 °C). Protect the device from excessive humidity (max. 90 %, without condensation). Do not bring the device into contact with rain, sand or excessive dust. Do not place it directly next to or on a radiator, microwave, induction cooker or other appliances that generate and emit strong electromagnetic fields; avoid direct sunlight.

8. Device Function

8.1 Preparation

Inspect the shipping carton for damage immediately upon receipt.

Contact your dealer immediately if the shipping carton is damaged and, if possible, take photos of the damage.

Carefully remove the IQ Balancer from the original packaging (bag). Place the supplied accessories within easy reach next to the IQ Balancer.

8.2 Decommissioning

Press the mode button for 2 seconds to switch off the IQ Balancer (LED on the right no longer lights up).

To be on the safe side, remove all cables to prevent them from kinking during storage.



WARNING!

Prevent water from entering the device.

8.3 Function Check

As soon as the IQ Balancer starts to operate, the right-hand LED lights up **blue** or **green**, depending on the device mode.

9. Care Instructions

9.1 Housing

Clean the IQ Balancer with a soft, damp cloth. Only use mild cleaning agents.



WARNING!

Solvent-based or corrosive cleaning agents are aggressive and damage the surface of the housing. Cleaning solutions can harm the user

9.2 Care, Cleaning and Maintenance of Sounders

Test the function of the sounders:

If you grasp both metal contact surfaces of the sounders as shown in the picture and hold them directly to your ear, you should hear a soft, high-pitched noise. If you have a high-pitched noise in your ears, you may not be able to hear the "noise".

Ask another person to check this. This function test should be carried out in a quiet environment, as ambient noise that is too loud can mask the quiet noise.



Figure 6: Function test of the sounders

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Avoid damage, e.g. due to:

- severe kinking of the cable
- tearing or pulling on the cable: This can cause the solder joint on the electrode to come loose
- pressure on the metal plates: Behind them are easily breakable ceramic piezo plates, which cannot be seen to be defective from the outside

The stainless steel sounders can be easily cleaned with a damp cloth using commercially available disinfectants that are also suitable for plastic. Please observe the manufacturer and application-specific instructions. No guarantee on flexible lines and sounders, as the functionality and service life depend on use and handling by the user. The sounders can be purchased separately as accessories.

10. Storage and Maintenance

The IQ balancer is maintenance-free.

11. Life Cycle

The IQ Balancer is made exclusively from high-quality materials. The device and accessories are fragile and should therefore always be handled with the utmost care. The rechargeable battery in the device (lithium polymer) has a service life of 2,000 charging cycles. Depending on the application, this corresponds to a period of 3-10 years. The battery can be replaced by the manufacturer if necessary. To do this, the device must be sent to the manufacturer. Please contact your dealer if problems occur with the IQ Balancer (see last page) that are not related to the maintenance time (battery life) and you require technical support or the device needs to be repaired.

12. Technical Data

Battery Weight	Lithium-polymer battery: 2400mA, USB-C charging cable 132 grams (including integrated battery)
Dimensions	Length: 120 mm
	Width: 65 mm
	Height: 22 mm
Signal generation	Ultrasound analogue: 40.000 – 50.000 Hz low level
Pink noise digital	1-20.000 Hz
Status display	2 x RGB LED
4 Tasten	On/Off / signal mode
	Volume plus
	Volume minus
	Start / pause / stop / next audio track / play mode

13. Useful Information for Users

Further detailed information on the history and development of the IQ Balancer technology can be found here: **gesundheit-und-sport.com/en/patrickflanagan**

14. Warranty

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The warranty for the IQ Balancer is 24 months from the date of purchase. The warranty covers faults caused by faulty design, faulty material or poor workmanship. This excludes the sounders and cables.

FGS is not responsible or liable for damage caused by:

- · failure to follow the operating instructions,
- improper operation or
- incorrect use or misuse of the IQ Balancer or its accessories



WARNING!

The warranty is immediately void if the IQ Balancer is opened by unauthorised persons.

15. Disposal

Discarded devices must be disposed of as electronic waste.







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