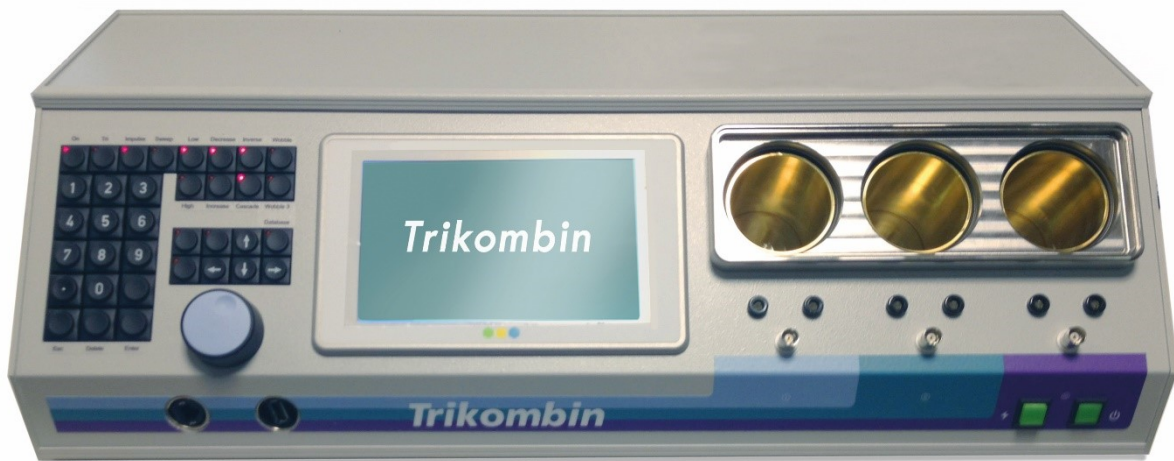




User Manual

Software Version 5.0.1.#3



The T RIMENSIONAL Device of Bioresonance

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1. Introduction

Trikombin is a powerful frequency generator with 3 outputs, which are mutually independent and isolated from each other. It is equipped with rechargeable batteries, which enable an independent operation for approximately 8 hours.

This manual describes the device with the software version 5.0.1#3.

2. Important Notices

2.1 Safety Instruction



- Never plug, under no circumstances, a banana plug into a power outlet.
- Always plug the earthing cable firstly into Trikombin or into the antenna and only then insert the cable into a power outlet.
- Do not use the device on people with a heart pacemaker.
- Do not use the device near the eye area.
- Do not connect the 3 frequency outputs in series.
- Do not open the housing of the device. There are no serviceable parts inside.
- Use only the provided fuses (3,15AT). In no case, greater fuses may be used.
- Use only the supplied AC adapter.
- Remove both fuses before transportation.
- Be careful while transporting the Trikombin, because the brass cups or lids might fall out.
- Keep the Trikombin clean and most importantly dry (wiping with a damp cloth is permitted).
- Please make certain to secure the Trikombin to prevent it from falling down. If someone pulls the connecting cables with great force, the device can be brought down, despite its non-slip rubber feet.



To ensure safety and prevention of damage to health, as well as damage to the device, complying with the operating instructions is essential. Mannayan GmbH & Co KG assumes no liability in case of misuse.

2.2 Unpacking

Before using the device, please check for the completeness of the supplied accessories:

1. Power adapter
2. 2 fuse holder and 2 micro fuses 3,15AT
3. Antenna housing
4. Antenna foot with matching fixing screws (2 pcs)
5. 3 cables (red, green, blue) with banana plugs
6. 1 cable with BNC connector
7. 2 earthing cables
8. 3 hand electrodes
9. Large metal cup tray cover (mounted)
10. 3 brass cups with lids (underneath the large metal cup tray cover).

After unpacking, please check the device thoroughly for any possible transportation related mechanical damage and loose inner parts. If a transport damage has occurred, please contact your supplier immediately. The device must not be used in this case.

2.3 Packaging and Transportation

Please retain the original box for possible future transportation. Any damage due to improper packaging is excluded from the warranty.

Please note that both fuses (back side of device) must be removed before any transportation.

The device should be stored in dry, enclosed spaces. If the device is stored or transported under extreme temperatures, it should be left to acclimatize for at least 2 hours before it is put into operation.

2.4 Designated Usage

Frequency therapy is a form of regulative therapy and is not yet part of conventional medicine-based scientific research and therefore not yet recognized. The terminology of the individual programs does not represent specific claims of efficacy. The device can be used to enhance the subjective well-being.

The device is to be operated in clean, dry places. It must not be operated in dust or extreme moisture, in places with danger of explosion or in places with aggressive chemical influences.

The device should be protected from direct sunlight.

The permissible temperature range – while in operation – varies from +15 °C to +30 °C. During storage or transportation, the ambient temperature can range between -20 °C and +70 °C. If condensation occurs during storage or transportation, the device must be acclimated for about 2 hours and dried by means of an appropriate circulation. Thereafter, the operation is permitted.

Nominal data with tolerance disclosures are valid after a warm-up time of at least 30 minutes at an ambient temperature of 23° C. All values without tolerance disclosures are recommended values of an average device.

2.5 Maintenance

The outside of the appliance should be cleaned regularly with a soft, lint-free duster. Please make sure that the device is turned off and disconnected from the power supply, before you clean it.

Cleaning the device or its parts with alcohol or other solvents is not allowed, except for cleaning the removable brass cups.

The display may only be cleaned using water or a suitable glass cleaner (but not with alcohol or other washing solvents).

The coloured banana cables, the ground cable and the two earthing cables should be checked regularly with the built-in cable tester.

2.6 Mains Voltage

The device operates with an AC voltage of 100 V to 240 V with a frequency from 47 to 63 Hz. A supply mains voltage switching is not necessary.

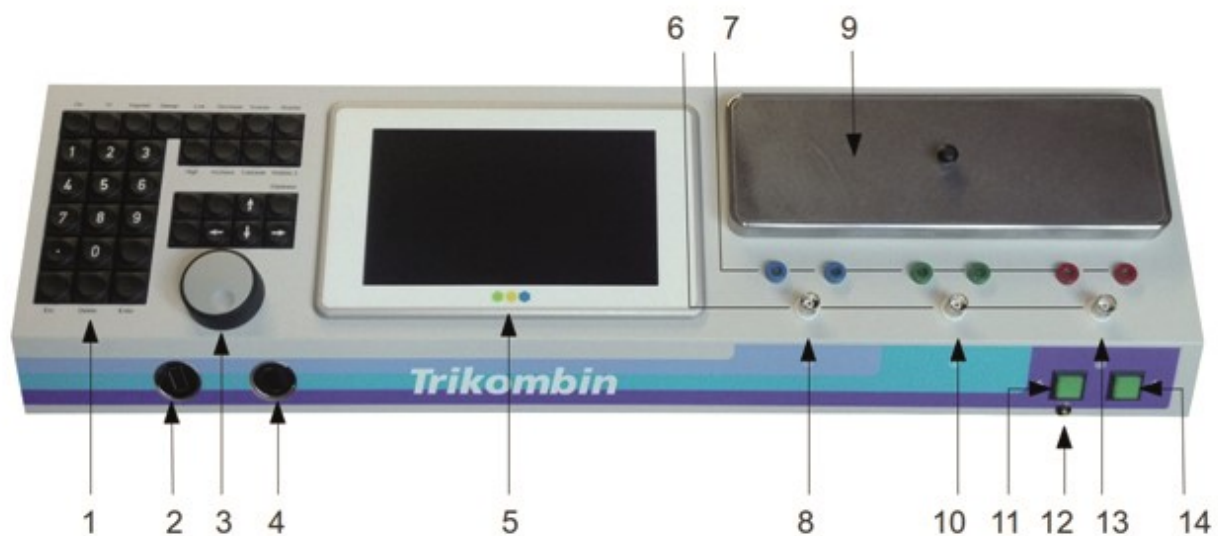
2.7 Mains Input Fuses

The device has 2 fuses: 3,15AT. One fuse (fuse A) ensures the charge cycle, while the second fuse (fuse B) ensures normal operation.

Only micro fuses with 3,15AT may be used.

If a fuse is blown repeatedly, a repair is needed. The device is to be shut down in this case.

3. Identification of Operating Elements



3.1 Front Side of the Trikombin

- | | | |
|--------------------|-------------------|---------------------|
| 1. Keypad | 6. BNC sockets | 11. Charging switch |
| 2. Ethernet socket | 7. Banana sockets | 12. Charging-LED |
| 3. Rotary encoder | 8. Channel I | 13. Channel III |
| 4. USB slot | 9. Cup tray cover | 14. Power switch |
| 5. Touchscreen | 10. Channel II | |

3.2 Back side of the Trikombin

The illustration below shows the technical connections and elements of the back side



- 1: Foot switch connector
- 2: DC terminal
- 3: Fuse A
- 4: Fuse B
- 5: Earthing socket

4. Before Initial Operation

4.1 Initial Preparation of the Device Directly after Transportation

Both fuses have been removed for transportation. Please insert both fuse holders with the provided micro fuses (3,15AT) into the fuse sockets (Fuse A and Fuse B) on the back side of the device. The fuse holder can be held by means of a bayonet catch. Insert the fuse holder with the pre-assembled fuse completely into the socket and fasten it with a ¼ turn to the right. Use an appropriate screwdriver for this task.

The touchscreen is covered with a protective foil. Please, remove the protective foil before turning on the device for the first time.

The cup tray cover is secured with two adhesive tapes during transportation. Please remove the two tapes as well.

4.2 Preparing the Antenna

The foot of the antenna is supplied with 2 screws, with which it should be attached to the antenna. Please note, that the antenna housing is plastic. Therefore, you should not use excessive force, while tightening the screws.

4.3 Connecting the Trikombin

1. Connect the power adapter to the charger socket of the Trikombin and the supplied power cord to a mains power outlet (AC outlet).
2. Please verify if the power outlet is suitably earthed with the supplied power outlet test instrument. Only if that is ensured, take one of the two supplied earthing cables. Please **FIRST** insert the banana plug into the earth socket of the Trikombin (back side). **THEN** insert the Schuko plug into a suitable power outlet. Connect both earthing cables to the same outlet with the help of a splitter or to two accompanying outlets – both earthing cables must be assembled within the same circuit.
3. **Caution:** No other cables must be used for earthing. The earthing cables **of the Diamond Shield Zapper** are NOT suited as well! **A functional suitable earthing is precondition for operating the Trikombin!** Please check all cables with the cable tester regularly (see chapter 7.1.1 *Cable Tester*)
4. If using an external footswitch (optional accessory):
Insert the plug of the foot switch into the corresponding socket on the back side of the device. Then turn both screws of the plug lightly (!) to secure the plug from falling out.
5. The output signals are available on the BNC-sockets as well as on the left banana sockets. A series circuit of the outputs is not allowed.

Please note: in principle, every frequency output has TWO signals. One signal (“hot” signal) carries the actual information. It is connected on the brass cup, the left banana sockets, as well as on the inner pin of the BNC socket. The second signal (“cold” signal) is used as reference and is connected on the outer pin of the BNC socket.

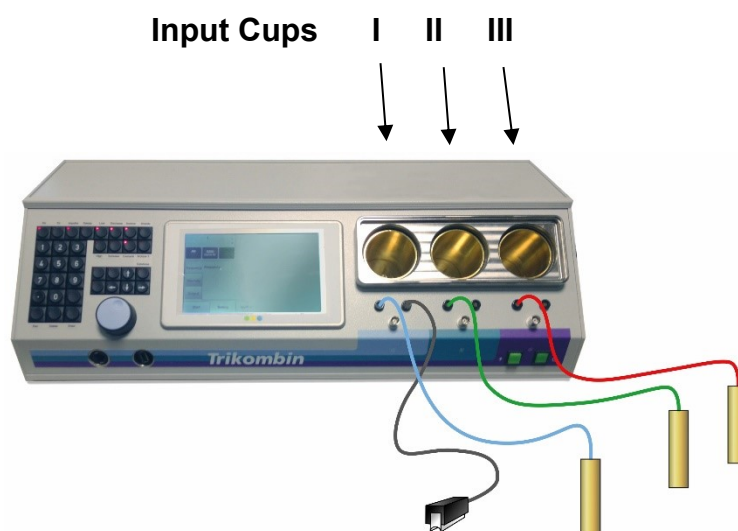
4.4 Connecting the Antenna

Please verify if the power outlet is suitably earthed with the supplied power outlet test instrument. Only if that is ensured, take one of the two supplied earthing cables. Please **FIRST** insert the banana plug into the earth socket of the Antenna. **THEN** insert the Schuko plug into a suitable power outlet.

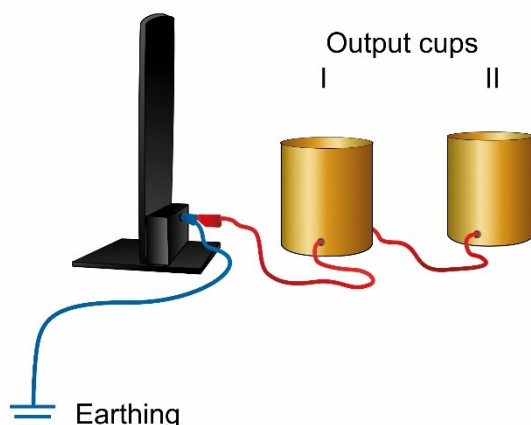
4.5 Connecting the Electrode Cables

Insert the banana plugs of the coloured cables each in the **LEFT** socket of the Trikombin and the other end in the supplied hand electrode.

An optional available ampoule tapper is connected via a random cable with a banana plug on the blue socket on the **RIGHT** side.



4.6 Connecting Output Brass Cups



Optional available output cups are connected after the antenna. The banana plug is inserted on the back side of the antenna into the earthing cable.

Attention: If the cups are attached *between* the Antenna and the earthing cable a loss of efficiency of the antenna is caused!

4.7 Connecting Additional Devices

The BNC sockets of the 3 channels can be used to connect suitable additional devices, such as optionally available loudspeakers.



5. Operating the Trikombin

5.1 Handling the Rechargeable Batteries

When storing the device, the rechargeable batteries should be recharged every six months.

The rechargeable batteries can be partially charged – it does not cause any damage.

As soon as the battery charge indicator in the display lights up red, the batteries should be recharged.

Operating the Trikombin is not possible during the charging process. The device charges faster when it is turned off.

If the device is not in operation for a longer period of time, the batteries should be previously recharged completely.

The rechargeable batteries are integrated and need not be removed for transportation. However, both fuses must be removed before transportation.

To achieve an optimal and radiation-free operation, the device should be disconnected from the main power supply.

5.2 Turning the Trikombin On

Press the power switch. The power switch lights green. While the Trikombin boots, you can see the product name on the touchscreen. Approximately after 20 seconds, the start screen appears and the device is ready.

5.3 Switching the Trikombin Off

To turn off, simply press the power switch so that its LED is not lit. The Trikombin must not be shut down.

5.4 Charging the Trikombin

The Trikombin has an electronic charger for the rechargeable batteries, which runs independently from the touchscreen (operator terminal). First, please make sure that the power adapter is connected to the mains voltage and the charging socket of the Trikombin.

Now press the charging switch. For a brief moment, they both light up: the charging switch and the underlying yellow charging-LED. Afterwards the two LEDs display the charge status as follows:

- a) The yellow charging-LED lights up, charging switch is dark (off): batteries are charging.
- b) The yellow charging-LED is dark, charging switch lights up: batteries are fully charged.

During the charging process, the operator terminal can be turned on by pressing the power switch. During charging it is impossible to activate the frequency outputs or to leave the mode "Start".

If the operator terminal is turned on during the charging process, the batteries will be charged normally. Under certain circumstances the charging circuitry doesn't detect when the

batteries are fully charged, as the turned on/activated operator terminal draws power from the batteries. This however has no influence on the safety or on the battery lifespan.

A full charge cycle takes approximately 3 to 4 hours. A partial loading or unloading is permitted and has no negative impact on the battery lifespan or its capacity. As soon as the battery charge indicator in the display lights up red, the batteries should be recharged.

5.5 Handling the Brass Cups

A brass cup is assigned to each output channel. The output signal is fed via the brass cup and then to the left banana socket and the BNC socket.

The brass cups can be removed, if necessary (e.g. for cleaning purposes). To enable this, one must remove the large cup tray cover and the covers of the brass cups. Afterwards each brass cup can be pulled out with little effort.

All three brass cups are identical, so they can be safely exchanged between the channels.

For reconnecting the brass cups, make sure that they are fully inserted. They must be put in with some force, to close the contact. The contact is made only on the last 5 millimetres of the downward movement.

6. Handling the Program Surface

6.1 Overview

The Trikombin software offers three main modes. These are selected using the tabs at the bottom of the screen:

- **Start**
A new session can be started and certain configurations can be made in this screen. This mode usually is only needed after switching on the device or when changing a session.
- **Testing**
Frequency programs can be loaded and adapted as necessary here. If appropriate frequency programs were found, they can be transferred to the Application Mode.
- **Application**
The selected and individualised frequency programs are executed here.

6.2 Basic Operation

6.2.1 Overview

Trikombin is operated using the touchscreen, the rotary encoder and the keypad.

The screen of the operator terminal is designed as a touchscreen. You can trigger the actions by gently pressing on an area of the screen with a finger or any blunt object.

The keypad keys operate as you are used to from your computer, with exception of the keys, that have a little lamp.

These keys with little lamps and their functions are described in section *7.2.2 Function Keys*.

6.2.2 Setting Values with the Rotary Encoder

The encoder enables to quickly change numerical values.

Simply tap your finger on the numeric value you want to change. The outline of the value is shown in bold, indicating that the value is active.

Now you can change the value using the rotary encoder. A faster turn causes a greater change in a value.

6.2.3 Other Functions of the Rotary Encoder

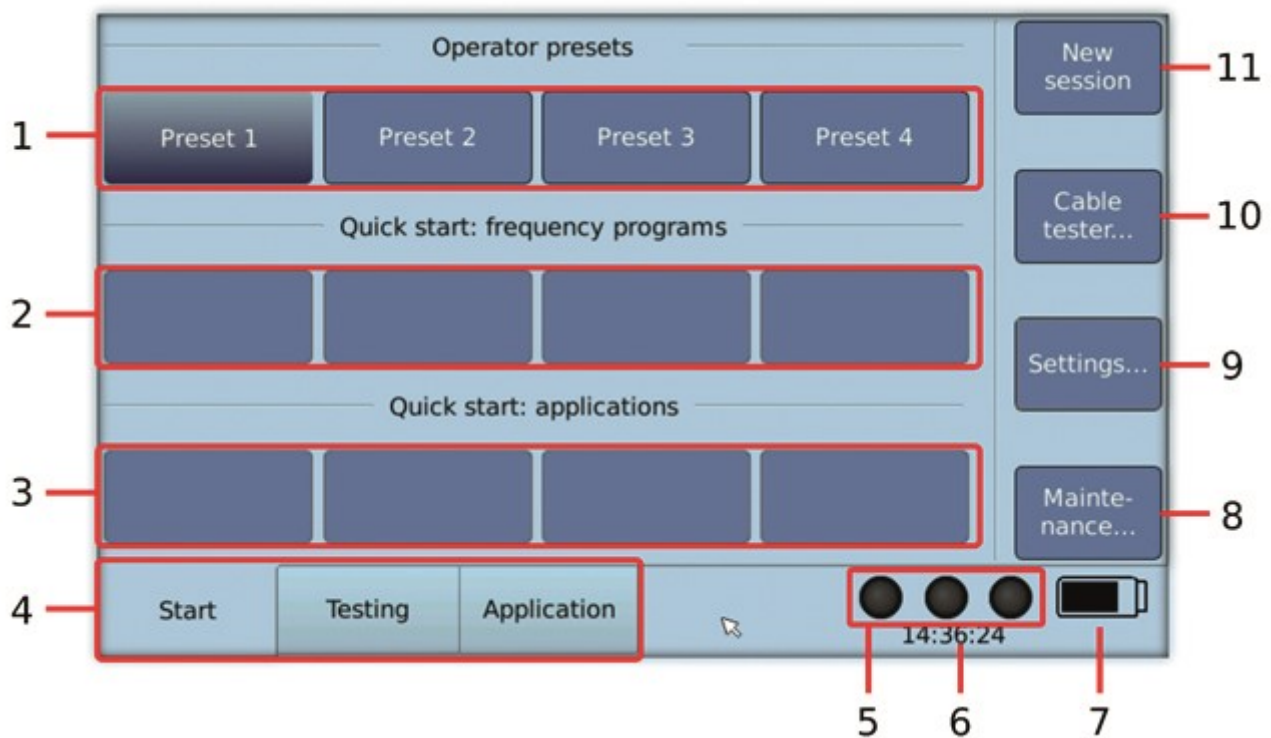
The rotary encoder can also be used to

- scroll touchscreen contents

to change the selected entry in a list.

7. Operating Modes

7.1 Start Mode



1. Buttons to switch between users (presets)

2. Quick start buttons for frequency programs

A frequency program can be assigned to each of the buttons. When pressing the button, the frequency program is loaded and the system changes into the Testing Mode.

The assignment is made in the Testing Mode: Press the button “More...” and then press “Assign to quick start...”.

3. Quick start buttons for applications

An application list can be assigned to each of the buttons. When pressing the button, the corresponding applications are loaded and the system changes into the Application Mode.

The assignment is made in the Application Mode: Press the button “More...” and then press “Assign to quick start...”.

4. Tabs to select the main modes Start, Testing and Application.

5. Activity state of the generators (on or off)

- On: all three lamps of the touchscreen flash green
- Off: all three lamps of the touchscreen are black

6. Time display

7. Battery charge state

8. Button to open the maintenance dialogue
It allows to update the firmware and to install additional licenses.
9. Button to open the settings dialogue
10. Button to start the cable tester
11. Button to start a new session. The following actions occur:
 - The Testing Mode will be brought to its initial state. All changes made to the frequency programs are reset.
 - All library chains added to the testing screen are removed.
 - The pitch is reset.
 - The contents of the Application Mode are deleted.

7.1.1 Cable Tester

All cables in use must be checked regularly with the built-in cable tester.

To do so, please proceed as follows:

1. Select the Start Mode and tap the button “Cable tester...”.
2. Make sure that nothing is connected to the BNC sockets and then confirm the according message.
3. Then connect the blue banana cable to one of the two blue banana sockets.
4. Now touch with the free end of the blue connector cable the outer metal ring of the BNC – socket, which is located directly below the blue banana sockets. Keep this contact for a few seconds.
5. The cable tester now indicates whether there is a sufficient contact and therefore the cable is intact or defect.
6. To exclude a loose connection, you should bend the cable near the connectors while you observe the display. It should indicate a steady contact.
7. With the screen buttons “Channel II” and “Channel III” you can switch to the other channels and test the other cables accordingly.

For testing the earthing cable, plug the banana plug of the earthing cable into a banana socket and touch the BNC socket with the metal contact of the Schuko plug.

Attention: a functional suitable earthing is precondition for functional usage of the Trikombin!

8. The black-red cable with a BNC plug can be tested by connecting it to a BNC socket and touching the banana cable’s red and black ends.

7.1.2 General Settings

In the menu “Settings” in the Start Mode, the following settings can be made:

Language

The Trikombin operates in English and German.

1. Tap the button “Settings” or respectively “Einstellungen“, if the device is set to the German language. The dialogue “Settings” appears.
2. Choose the desired language by means of selecting the button “English” or respectively “German”.
3. End the dialogue with “Close” or “Schließen”.

Brightness of the Touchscreen

1. Adapt the brightness via the square below the lamp symbol – hold it pressed and move it up or down.
2. End with “Close”.

Testing – Standard Setting for the Operation Mode Testing

1. Tap on “An” or “Clock” to select the Start Mode.
2. End with “Close”.

Application - Default Setting for the Application

The default settings for the application can be set for each operator separately. These default settings are used, when the button “Add program” is pressed in the Testing Mode.

1. Enter the desired standard execution time for frequency programs and acupunctures in minutes and seconds. This setting is automatically suggested when adding frequency programs from the Testing Mode to the application list and can be modified if necessary. See section *7.2.7 Adding Frequency Programs to the Application Mode*.
2. Please activate the check box “Stop before Start”, if this setting is to be activated by default.
3. Tap the “Ok” button to save your settings.
4. End the dialogue “Settings” by tapping the “Close” button.

Date and Time

1. Tap the button “Date and Time “. The dialogue “Date and time settings” appears.
2. The date and time are displayed. Use the arrow keys - left and right - on the keypad, to switch between the numbers. The values of the input field are displayed in following order: day, month, year, hour, minute, second.
3. You can change the value using arrow keys up or down or by turning the rotary encoder.
4. End with “Save” and “Close”.

Speaker Volume of Acoustic Signals

1. Tap the button "Speaker Volume". The dialogue "Set Speaker Volumes" opens.
2. Use the rotary encoder to adjust the active entry.
3. Press "Test" to check your settings.
4. Switch to other entries by tapping.
5. End with "Ok" and "Close".

7.1.3 Operator Presets

Trikombin supports up to four different operators, which can have their own user-defined settings.

Selecting Presets

1. In Start Mode press the button of the desired preset (e.g. Preset 2).
2. The button of the selected preset is highlighted.

The default settings for the application as well as the quick start buttons for frequency programs and applications can be set for each operator separately.

7.1.4 Installing Firmware Updates, Licenses and Libraries

Some features of the Trikombin require additional licenses or library files. You will get those from your distributor. Firmware updates are provided free of charge. The Trikombin also allows installation of compatible libraries from other providers.

- Update files end with .7z
- License files end with .lic
- Library files end with .inst

Updates, new or updated licenses or libraries can be installed as follows:

1. Copy the files into the root directory (therefore NOT in a folder) of an USB memory stick. Please note:
 - There must not be any folders with special symbols in its name or other files ending with .7z, .lic or .inst in this directory. (Preferably the USB stick is empty.)
 - You can install multiple files at once.
 - A library file can be installed only if the corresponding license exists. The license may either have been previously installed or you can install it along with the library.
2. Insert the USB stick into the USB slot of the Trikombin.
3. Activate the Start Mode by pressing the corresponding tab at the bottom left in the touchscreen and press the button "Maintenance". The dialogue "Maintenance" opens.
4. Tap the button "Add license or library...". The device will now install the license and library files from the USB stick.
5. Confirm the corresponding messages.

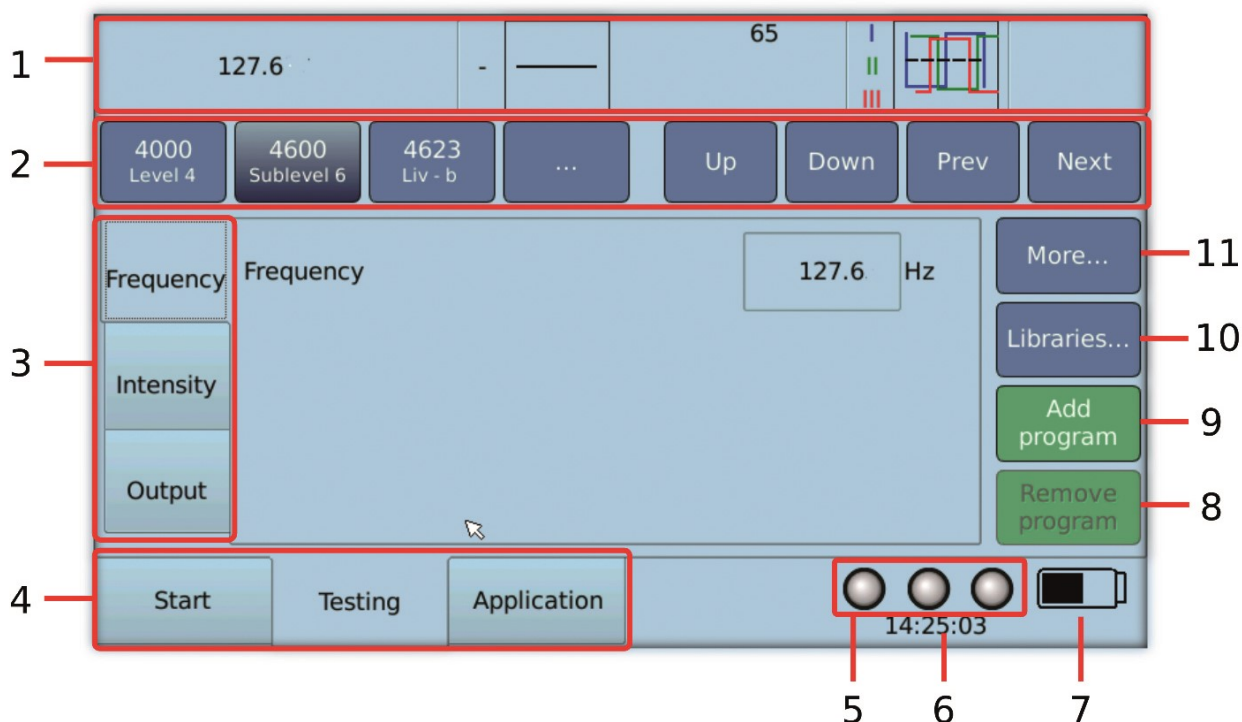
6. The installed licenses and libraries are listed in the maintenance dialogue. Verify, that the new licenses or libraries are listed.
7. Close the maintenance dialogue.

7.2 Testing Mode

Please note, this operating mode is deactivated while the device is being charged. Therefore, the charging process must be interrupted.

The Testing Mode can be activated by tapping the tab “Testing”.

7.2.1 Important Elements of the Testing Screen



1. Overview bar: displays the current settings
2. Navigation bar: for quickly switching between stored frequency programs
Mode buttons An (anatomical) / Clock (meridian clock) / BR (bioresonance)
3. Tabs for frequency settings enable you to choose what is displayed in the central screen
4. Tabs for selecting the operating modes Start, Testing and Application
5. Indication of the state of the generators (on or off)
6. Time display
7. Battery charge state
8. Button to remove the current frequency program from the application list
9. Button to add the current frequency program with the current settings to the application list
10. Button for the library feature. This is only available, if a library and the corresponding license is installed.
11. Button to activate additional functions of the frequency programs

7.2.2 Function Keys

Frequently used functions for the Testing Mode are readily available by using dedicated function keys of the keypad. These keys are equipped with lamps that indicate the state of the respective function. When the lamp is lit, the corresponding function is turned on, otherwise it is turned off.



The keys have functions as listed below. Please note, that the keys can only be used, when the Testing Mode is active. An exception is the “On” key, which can also be used in the Application Mode.

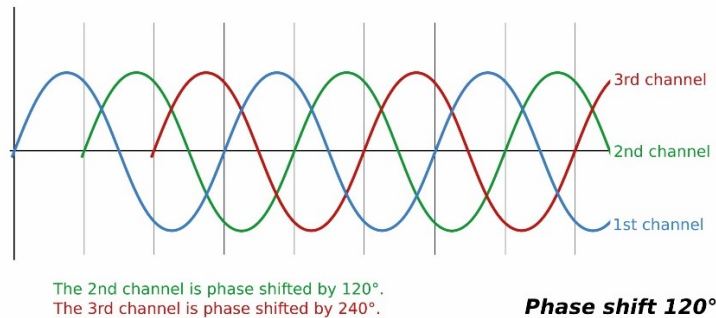
- **On:** Turns the frequency generators on and off
- **Tri:**
Active: All three frequency generators are activated (blue, green, red)
Inactive: Only frequency generator I is activated (blue)
- **Impulse:**
Active: The frequency generators are turned on and off in short intervals.
- **Sweep:** A predefined intensity range is passed through within a certain time frame.
- **Low:**
Active: The intensity is limited to values from 0 to 23.
Inactive: The intensity can be set higher than 23.
- **High:**
Active: The intensity is limited to values from 25 to 160.
Inactive: The intensity can be set lower than 25.
- **Decrease:**
Active: The intensity decreases gradually, starting from a peak value.
Inactive: The intensity remains constant.
- **Increase:**
Active: The intensity increases gradually, starting from minimum value.
Inactive: The intensity remains constant.

- **Phase:**

If the license for “Special Wave Functions” is installed, this function key will switch between no phase shift (lamp is off), phase shift 120° (lamp is lit) and phase shift 180° (inverse, lamp is lit).

Otherwise this function key switches only between no phase shift and phase shift 180° (inverse).

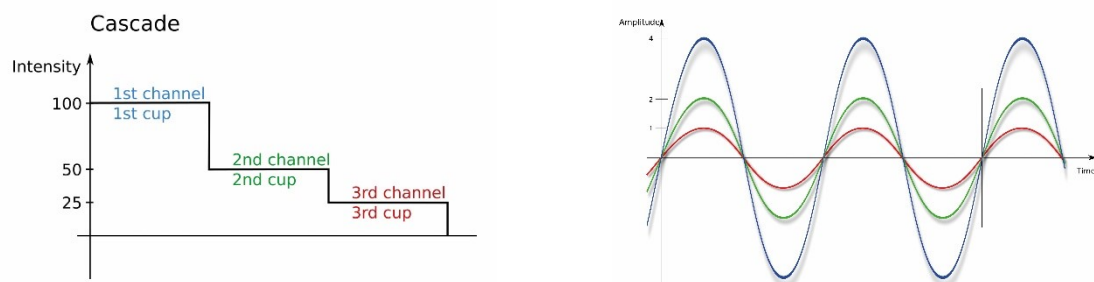
Active: The 2nd and the 3rd channel exhibit a phase shift compared to the 1st channel



Inactive: The 2nd and the 3rd channel have the same phase as the 1st channel.

- **Cascade:**

Active: The 2nd channel has one half of the intensity, the 3rd channel has one quarter of the intensity of the 1st channel.



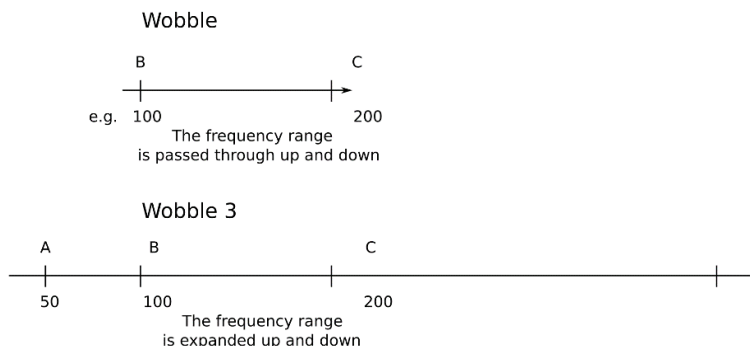
Inactive: The intensity is constant across all three channels.

- **Wobble:**

Active: The frequency range is continuously and stepless changed between two frequency values.

Inactive: The frequency remains constant.

- **Wobble3:** Like Wobble, yet the frequency range is expanded by the underlying and overlying frequency range.



- **Wob.dir.:** (Wobble direction)
This key is used to switch between “Wobble up” (right arrow), “Wobble down” (left arrow) and “Wobble in both directions”. The lamp is lit when either “Wobble up” (to the right) or “Wobble down” (to the left) is activated.
- **Modul.:** (Modulation)
Active: Modulation is activated. A second signal is generated simultaneously in each generator. Thus 6 frequencies are generated simultaneously.
Inactive: Modulation is inactive.
- **Database:**
Active: A frequency program can be selected directly by entering a number. The function of this key is only available in the testing screen. While this key is activated, the numeric keypad can only be used for program numbers. In the application screen, it is always possible to directly choose a Testing Mode by entering a number.

Library numbers start with the punctuation mark period (.) (e.g.: **.11539**).

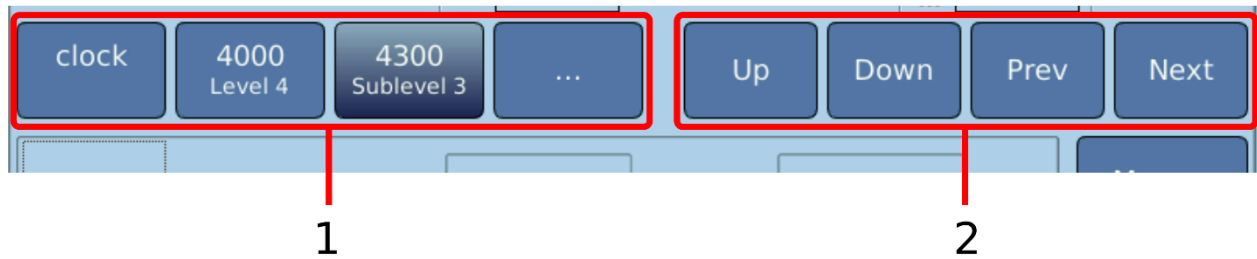
Inactive: An entered number is interpreted differently according to the current mode (e.g. intensity or frequency)
- **User:**
This key is labelled with an “U” and is located above the “Enter” key.
If this key is used in the Testing Mode the dialogue to directly load frequency programs opens (see chapter 7.2.4 and 7.3.4). Within this dialogue this key toggles between user-defined frequency programs and system frequency programs.
- **Esc** (Escape) cancel
- **Delete** Delete an entry
- **Enter** Confirm
- **Pulse** This key is located below the “Wob.dir” key. It Activates the Pulse/Wobble-Synchronisation, Wobble and Wob.dir to the right

7.2.3 Navigation Bar

The Trikombin is equipped with a license with more than 600 pre-defined frequency programs. They are arranged hierarchically.

The navigation bar is used to

- quickly access the desired frequency program and
- to display the currently selected frequency program.



- 1: The left area is used to directly navigate the hierarchy of the frequency programs. By tapping on one of the buttons, all frequencies belonging to this hierarchy level are displayed. This enables a quick selection of the desired frequency program.
- 2: The right area is used to gradually navigate. “Up” and “Down” changes the hierarchy level, the arrows change within a level.

If the Database key is activated, the four arrows keys can be used to navigate. The right and left arrows switch between programs, the up and down keys switch between the hierarchy levels. If the database key is inactive, the arrows switch between the screens “Frequency”, “Intensity” and “Output”.

7.2.4 Options for Directly Loading a Frequency Program

If the number of a frequency program is known, it can be loaded directly via the dialogue “Loading frequency program”. This dialogue can be cued via the following options:

Option 1: User Key

1. Press the “User” key (key located above “Enter”).
2. Pressing the key again selects the user-defined frequency programs.

Option 2: Database Mode

1. Activate the function key “Database”. The lamp of the key must be lit.
2. Enter the number of the frequency program via the keypad. “Loading frequency program” appears in the touchscreen. The function of this key is only activated in the Testing Mode.
3. Press the “Enter” key or tap on the corresponding button of the dialogue.

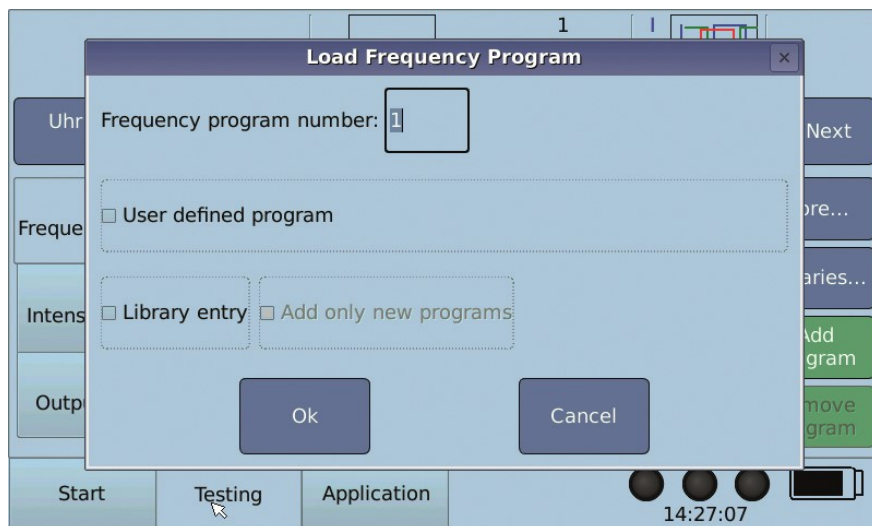
While the key “Database” is activated, the numeric keypad can only be used for program numbers. The four arrow keys of the keypad can be used to select a program while the “Database” key is activated.

Option 3: Call via Menu

1. Tap the button “More...” (right side of the screen). The corresponding menu appears on the touchscreen.
2. Tap “Loading frequency program...”.

Option 4: Call via Application Mode

In the Application Mode, a frequency program can always be directly selected by entering a number via the keypad.



After you have opened the dialogue:

1. Enter the number of the frequency program via the keypad.
2. Select whether you want to load a user defined program by pressing the “User” key, or activate “User defined program” by tapping the check box.
3. Select whether you want to load a library chain by pressing the “.” key or activate “Library entry” by tapping the corresponding check box
4. Confirm by pressing the “Enter” key or tap “Ok”.

7.2.5 Modifying Frequency Programs

After the desired frequency program has been loaded, it can be modified using the function keys or the program interface as needed.

Please note: Once a frequency program has been modified, the same modifications will be adopted for subsequently loaded frequency programs.

Example:

The frequency program 1709 is loaded. Then, the intensity is changed to 100. Thereafter, the frequency program 1710 is loaded. The intensity of 100 remains although the frequency program 1710 has originally an intensity of 65.

If you want to go back to the original version of the currently loaded frequency program, proceed as follows:

1. Tap the button “More ...” (right hand side). The corresponding menu will appear on the touchscreen.
2. Tap “Undo modifications of frequency program”.

The changes made are also reset by pressing the “New session” button in the Start Mode.

7.2.6 Adjusting the Pitch

The Trikombin supports the entry of a pitch. This is used to tune the pre-defined frequency programs to the respective person.

The pitch should be set at the beginning of the testing. Please note that the pitch of frequency programs that are already stored in the application list is not changed when a new pitch has been entered.

The pitch is reset (deleted) when the button "New session" in the Start Mode is pressed.

To adjust the pitch, proceed as follows:

1. Activate the Testing Mode by clicking the "Testing" tab.
2. Load the desired frequency program with which you want to adjust the pitch (see chapter 7.2.4 *Options for Directly Loading a Frequency Program* or 7.2.3 *Navigation Bar*).
3. Tap on the button "More..." (right hand side). The corresponding menu opens.
4. Tap on "Adjust Pitch...". The "Adjust Pitch" dialogue opens.
5. Set the pitch as desired. As usual, you can switch on or off the frequency generators with the "On" key or with the foot switch.
6. Close the dialogue by pressing the "Ok" button.



Operating Elements of the Dialogue "Adjust Pitch"

1. Display of the current frequency.
 - The digit below the black cursor can be modified by means of the rotary encoder, the foot switch or the keys up and down.
 - Via the left and right keys the position of the cursor can be changed.
 - When the frequency is displayed in black, then the changes to the frequency are immediately taken over by the frequency generators.

- The number can also be changed by means of the numeric keys of the keypad. As soon as this is done, the frequency is shown greyed out which indicates, that the changed frequency is not yet taken over by the frequency generators. Only by pressing one of the buttons Hz, kHz, MHz or “Ok” the modified frequency is taken over by the frequency generators.
2. Buttons to select the unit:
 - Hz: Oscillations per second (e.g. 100 Hz are 100 oscillations per second).
 - kHz: 1000 oscillations per second (e.g. 100 kHz are 100 000 oscillations per second).
 - MHz: Million oscillations per second (100 MHz are 100 million oscillations per second).
 3. Display of the original frequency of the frequency program.
 4. Display of the pitch resulting from the current frequency.
 5. Button to delete the current frequency.
 6. Button to reset the pitch. It sets the current frequency back to the original value and therefore the pitch to 0%.

7.2.7 Adding Frequency Programs to the Application Mode

For adding a frequency program to the Application Mode proceed as follows:

1. Load the desired frequency program (see chapter 7.2.4 *Options for Directly Loading a Frequency Program* or 7.2.3 *Navigation Bar*).
2. If necessary: change the program attributes with the function keys or the program interface.
3. Click the button “Add program” (right hand side of the screen). The dialogue “Add ... to application” appears.
4. Enter the desired execution time. The default value can be modified by tapping on it and modifying via the rotary encoder or via the numeric keypad.
5. Select “Stop before start” if the execution should stop before this frequency program, which allows e.g. to change the contents of the brass cups or to place the electrodes differently.
6. Optional: enter a comment. It will be displayed in the application list.
7. Press the “Enter” key or tap on the corresponding button of the dialogue.

7.2.8 Editing Frequency Programs of the Application List in the Testing Mode

If you want to reprocess the frequency programs, that are stored in the application list, in the Testing Mode, proceed as follows:

Option 1: Selection via the Navigation Bar

1. Tap the button on the far left in the navigation bar. All frequency programs of the highest hierarchical level are listed.
2. Tap the green button labelled “Appl.”.
3. Tap the button “Down” in the navigation bar. Now the first frequency program of the Application-screen is loaded. Or tap the button “...”. Now all frequency programs of the application list are listed. Tap on a program to load it.

By using the buttons “Prev” and “Next” of the navigation bar, you can load the previous or next frequency program of the application list.

Option 2: Call the Testing Mode during the Running Application

1. Select the desired frequency program in the application screen by means of the rotary encoder.
2. Start the application by pressing the “On” key of the keypad. The currently selected frequency program is executed.
3. Switch to the Testing Mode by clicking on the tab “Testing”.
4. The desired frequency program is now loaded in the Testing Mode and executed. Please note that it is not automatically ended or switched to the next frequency program when the execution time is over. This must be done manually. Now the application list with all programs is loaded to the navigation bar.

After a frequency program was loaded from the application list with one of the two options described, you can modify it as needed. Please note that any changes that you make in a frequency program will not be applied to the next frequency program in the application list.

In order to make it immediately evident that frequency programs from the application list are loaded in the Testing Mode, the corresponding buttons in the navigation bar are shown in green.

Applying the Modifications

Press the button “Add program” if you want to re-apply the changes that have been made in the Testing Mode to the Application Mode. The dialogue “Add ... to Application” now offers the option to replace an existing program.

If you have determined that a frequency program is no longer needed, you can tap on the button “Remove Program” which removes the program from the application list.

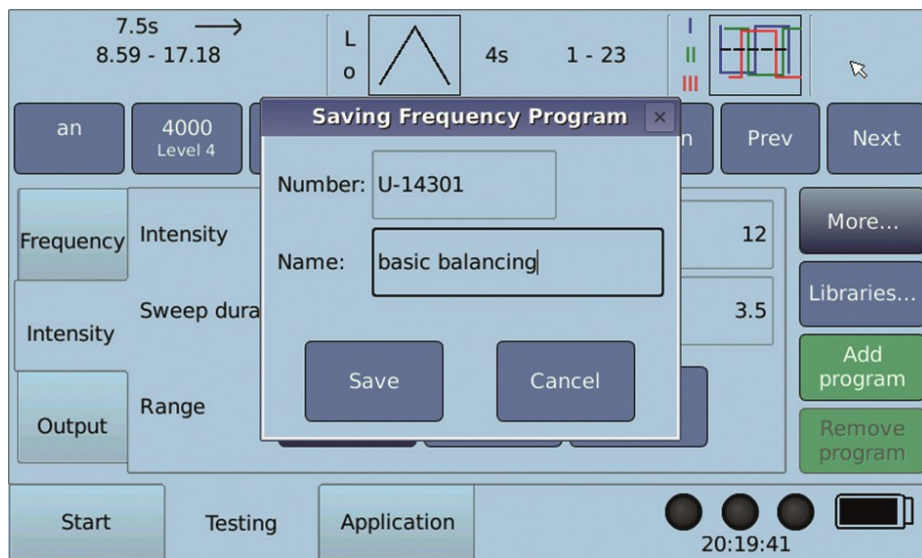
Please note: the same signals are generated if the frequency generators are activated (key “On” is lit, 3 little lamps on the touchscreen flash green) and the same settings in the Testing Mode and Application Mode were selected.

7.2.9 Saving User-defined Programs

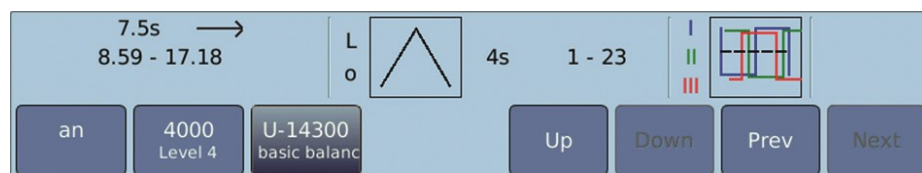
Every frequency or existing frequency program can be stored as a “User-defined frequency program” with its current settings.

For example, you want to save a basic balancing:

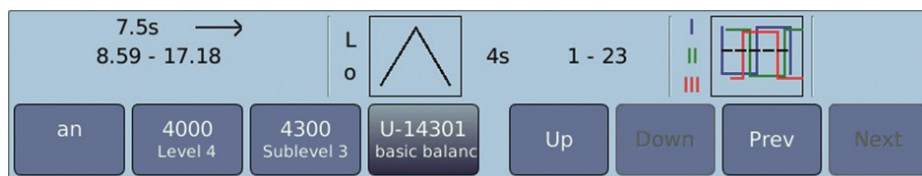
- Go to “More...” → Database → “Save frequency program” or “Save frequency program (new level)”
- Select a number. U-1 is the default value.
- Enter a name. Tapping the field opens the keypad.
- Tap “Save”



Saving the Frequency Program:



Saving the Frequency Program (New Level):



7.2.10 Terminator Feature

The feature “Terminator” enables a program to be automatically transferred in 10 variations into the application screen, whereby:

- the Wobble time – depending on the setting – will be increased by 10%, or decreased by 5% respectively.
- the execution time will be adapted so that an adjustable number of complete Wobble cycles will be executed.

To use this feature, follow the instructions below:

1. Load the desired frequency program and modify all required settings.
2. For the Terminator feature, Wobble must be activated.
3. Tap the button "More..." (right side of screen) and tap "Terminator". The dialogue "Terminator" appears.
4. Select the desired number of cycles (the number of all Wobble cycles, which is executed for each of the 10 Wobble times).
5. Choose if the currently selected Wobble time must be in- or decreased.
6. The device displays the total execution time, which results from the adjustments to the settings.
7. Tap the button "Add".
8. The program sequence has now been added to the Application Mode.

7.2.11 Foot Switch

A foot switch with three separate pedals is offered as an optional accessory. The foot switch only works in the Testing Mode.

Connecting the Foot Switch

Turn off the device before connecting the foot switch. The socket is on the back side of the device (labelled "Foot pedal"). The knurled screws of the plug should only be tightened very slightly, to prevent damage to the plug or the socket.

Switch Functions

The functions are as follows:

- Left pedal: Turns the frequency generators on and off (identical to the "On" key of the keypad).
- Central pedal: Depending on whether a numeric field is activated or not:
 - Numeric field: lowers the numeric value
 - Other field: selects the previous frequency program
- Right pedal: Depending on whether a numeric field is activated or not:
 - Numeric field: increases the numeric value
 - Other field: selects the next frequency program

When a numeric field is activated and the central or right foot switch is held down, the keystrokes are automatically repeated.

7.3 Application Mode

Please note: this mode is disabled, when the device is being charged. Therefore, charging must be interrupted by pressing the charging key.

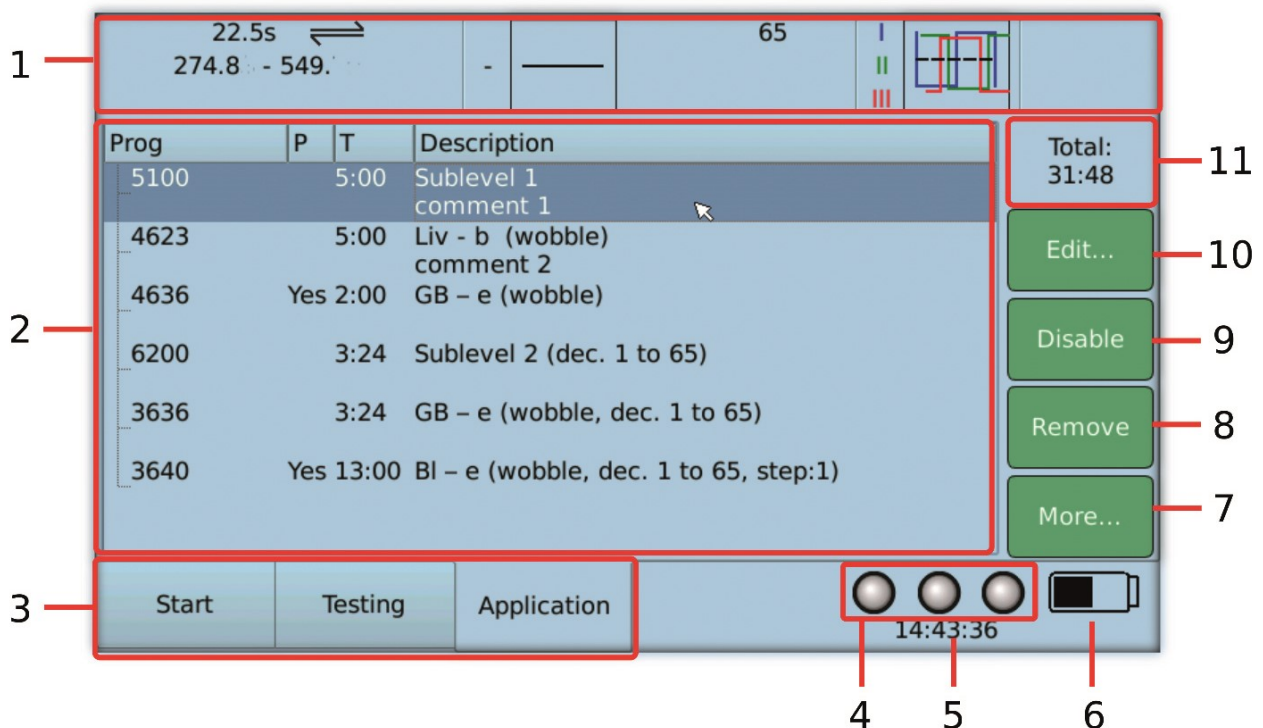
The Application Mode can be activated by pressing the corresponding tab at the bottom of the screen.

7.3.1 Overview

Completely configured frequency programs are collected in the application list. Frequency programs are added to the application list either via the Testing Mode or directly by entering their number.

- The Application-screen allows to change the list (e.g. delete or move entries).
- The frequency programs in the application list can be executed automatically.
- Once an application list is created it can be saved and used again at a later time.

7.3.2 Important Elements of the Application Mode



1. Overview bar: displays the settings of the current frequency
2. List of the frequency programs (application list)
3. Tabs to select the main operating modes Start, Testing and Application
4. Indication of the state of the outputs (generators) (on or off)
5. Time display
6. Indication of the battery charge state
7. Button to display the menu with additional functions
8. Button to remove the selected frequency program

9. Button to de-activate (disable) the selected frequency program (or to activate (enable) it, if it was already de-activated). A de-activated entry is displayed in grey and will be ignored during execution.
10. Button to edit some attributes of the selected frequency program
11. Display of the total execution time of all listed frequency programs

7.3.3 Contents of the Columns of the Application List

The columns of the application list display the following data:

- **Prog**
Number of the frequency program
- **P**
“Yes” is displayed when “Stop before start” was selected for the frequency program. In this case, the execution of the application list will be paused before this frequency program. This is useful, if e.g. the contents of the brass cups or the location of the electrodes should be changed for the execution of this frequency program.
- **T**
Displays the execution time of the frequency program in minutes and seconds.
- **Description**
The description includes the following information:
 - Name of the frequency program
 - Changes made in comparison to the original frequency program
 - Comment (if entered by the operator)

7.3.4 Adding Frequency Programs to the Application List

Frequency programs can either be added to the application list by means of the Testing Mode (see chapter 7.2.7 *Adding Frequency Programs to the Application Mode*) or – if the number of the frequency program is known – as follows:

- Enter the number of the frequency program via the keypad. The dialogue “Add program to Application” appears on the screen.
- Select if you wish or do not wish to load a user-defined program via pressing the “User” key (the key above “Enter”) or tapping the corresponding field of the dialogue.
- Enter the desired execution time.
- Select “Stop before start” if the execution should stop before this frequency program, which allows e.g. to change the contents of the brass cups or to place the electrodes differently.
- Optional: enter a comment. It will be displayed in the application list.
- Press the “Enter” key or tap on the corresponding button of the dialogue.

7.3.5 Selecting a Frequency Program

When the execution is stopped, frequency programs can be selected as follows:

- tap on the corresponding line in the list or
- use the rotary encoder

If there are more entries in the list than can be displayed on the screen, you may have to scroll the list. This will be done automatically if the rotary encoder is used.

To scroll, you can also tap the dark blue area of the scroll bar.

7.3.6 Execution of the Application List

The frequency programs in the application list are executed in the order they are displayed.

The first frequency program, which will be executed, is the one which is currently selected (the line with the blue background).

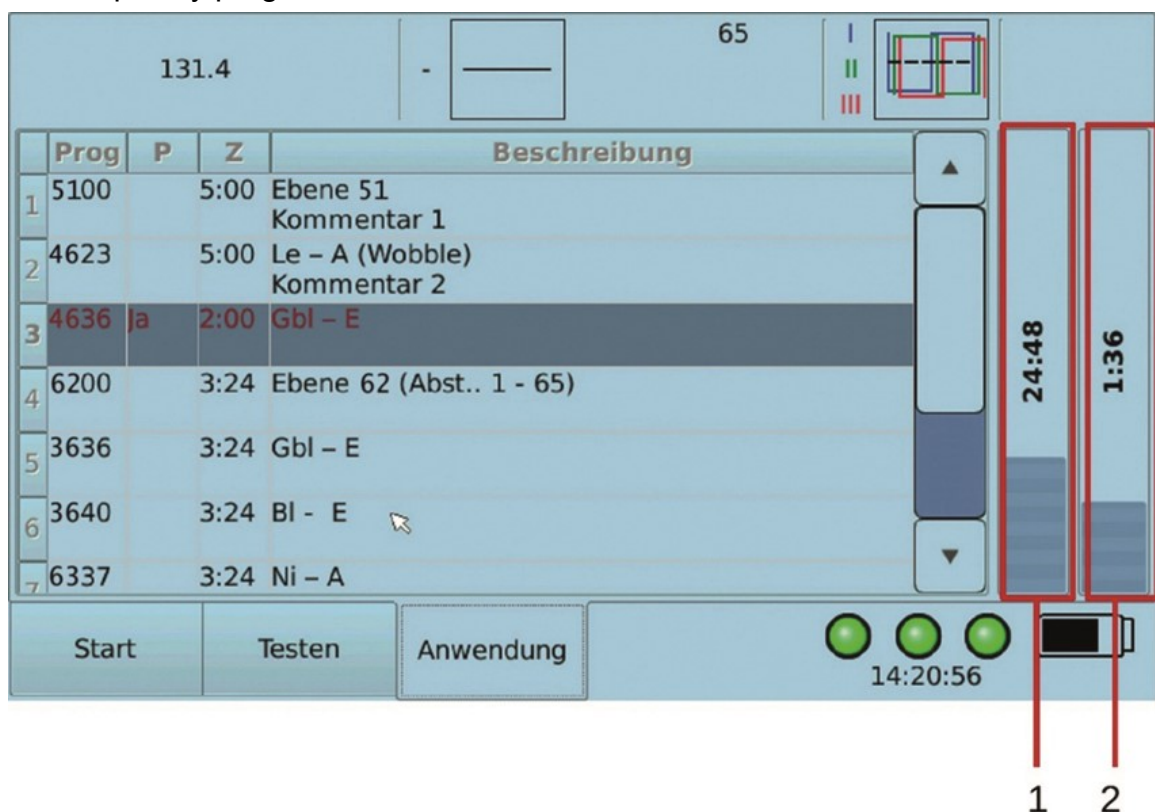
By pressing the “On” key (keypad, top far left) the execution will be started or stopped.

When the execution is stopped, the frequency program which was executed last, is displayed in red letters. If the execution is started again and this frequency program is still selected, only the remaining execution time of the program will be used.

No changes to the application list can be done while the list is being executed.

During execution, the device displays the remaining total execution time (1 in the illustration below) and the remaining execution time of the current frequency program (2 in the illustration below).

When a frequency program was completely executed, the device switches automatically to the next frequency program.



After the execution of all frequency programs of the application list, an acoustic signal is emitted and the message "Execution of the Applications completed" appears. Please confirm with "OK".

7.3.7 Acoustic Signals

During the execution of the frequency programs acoustic signals are used under the following circumstances:

- When the execution is started
- At the change to the next frequency program (without stop)
- At the change to the next frequency program (with stop)
- When the execution is completed.

The volume of the acoustic signals can be configured in the settings dialogue of the Start Mode.

7.3.8 Moving a Frequency Program

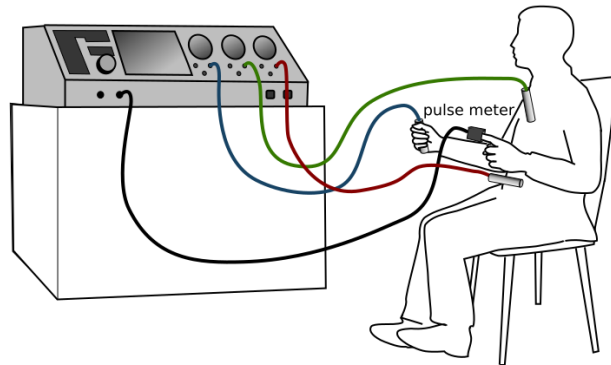
1. Select the frequency program you would like to move in the application list.
2. Tap on the button "More..." (right hand side of screen). The corresponding menu appears on the screen.
3. Tap on "Move...". The dialogue "Move via Rotary Encoder" appears.
4. Use the rotary encoder in order to change the position of the entry.
5. Tap on the button "Done".

7.4 Working with Pulse/Wobble-Synchronization

7.4.1 Connection of the pulse meter

On the pictures below please find the correct fitting of the Pulse/Wobble device. The metal USB plug is fold open and inserted into the USB slot of the Trikombin.

The pulse meter ear clip or alternatively the finger cap is connected with the USB device.



Finger cap:



The Finger cap is attached on the forefinger. The used hand should not hold the Trikombin-electrode to enable a relaxed hand posture. The inside measure point has to be in good contact with the skin. The finger should not touch the tip of the hood, the slit should stay in

nearly closed position.

Ear clip:

The Ear clip is fixed on one earlap with good skin contact.

As soon as the device is connected with the Trikombin a grey heart appears on the Screen next to the three operating lamps. Due to highly sensitive infrared sensor technology heart findings can be displayed by very little movements before skin contact is given.

As soon as the pulse meter detects a pulse beat the heart turns red and the current heart rate is shown beneath:



7.4.2 Starting the Pulse/Wobble-Synchronisation

- Wobble 1 has to be activated.
- Activate the assigned function key on the keypad.

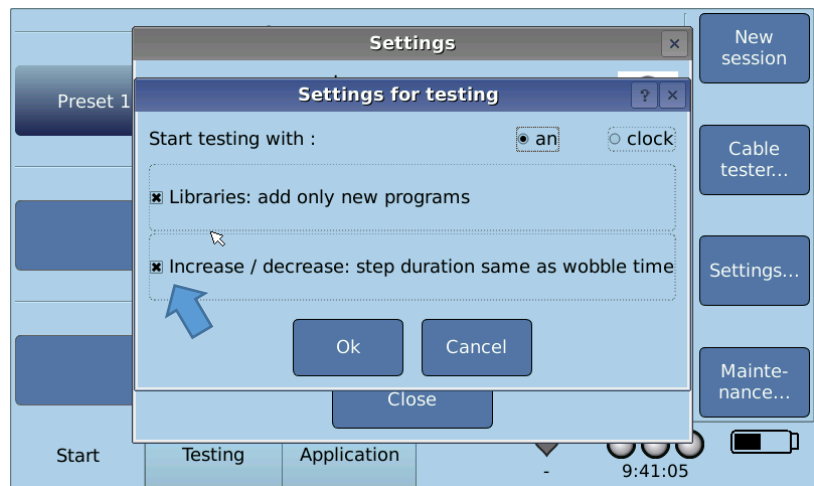
Starting the Pulse/Wobble-Synchronization

- the lamp of the function key is lit,
- the Wobbletime-field is faded out
- and Wob.dir is automatically set to → (wobble to the right).



Wobbletime is synchronized automatically with the current heart rate within milliseconds. Shall synchronization also be carried out for *Increase* and *Decrease* step duration, the setting has to be activated.

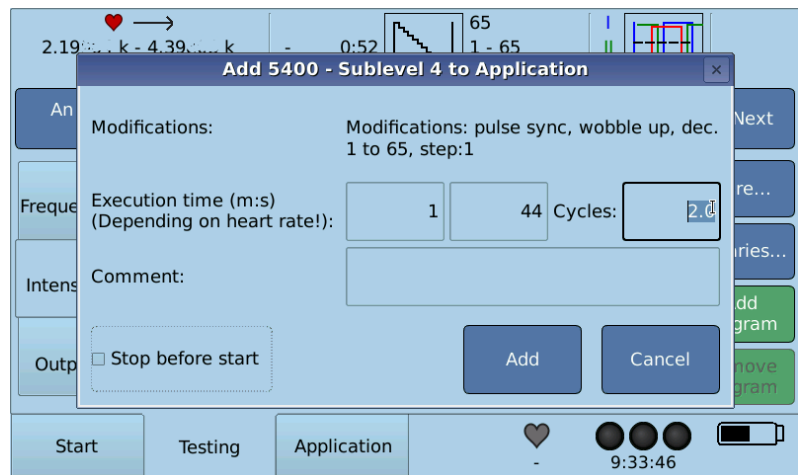
Go to *Start* → *Settings* →
Testing and activate as follows:
 Confirm with *Ok*.



As the function *Increase* or *Decrease* is activated, the field *Step duration* is faded out in the Testing screen and step duration is synchronized with heart rate and wobble time automatically.

There are two options transferring the actual program to the Application list:

- The number of Increase- or Decrease-Cycles can be defined. The displayed time is calculated with the current pulse temporarily.
- Or the favored time is adjusted in minutes and seconds. The cycles are calculated automatically.
- Confirm with *Add*.



In case the pulse meter loses signal the application is halted. It will be continued as soon as the heart beat is detected again. In case of more than 30 seconds interruption an acoustic signal will be given.

7.5 Working with Diamond Shield Chip Cards

7.5.1 Overview

If the license “Chipcard functions” is installed, Master Chipcards from the Diamond Shield devices will be supported. Prerequisite for this is a compatible USB card reader.

One or more sequences can be stored on the Diamond Shield Chipcards. Each sequence can contain one or more frequency programs.

The Trikombin supports the following operations with the Master Chipcards of the Diamond Shield device:

- Displaying the contents of the chip card
- Importing the contents into the application list of the Trikombin
- Saving the application list of the Trikombin as a new sequence on the chip card
- Deleting sequences or frequency programs from the chip card
- Changing the order of sequences on the chip card

7.5.2 Supported Diamond Shield Devices

The software version of the Diamond Shield needs to be 2.0.2 or greater, so that it can use the Master Chipcards that were created or modified by the Trikombin.

Starting with Version 2.1 of the Diamond Shield software, some improvements have been implemented:

- The maximum possible frequency increased from 2.0 MHz to 2.5 MHz.
- Different intensities within a sequence are supported.

When you use the Trikombin to save programs on a chip card, you can choose for which Diamond Shield version the chip card should be created (version 2.1 and above or version less than 2.1).

If you are unsure, please choose the version below 2.1 when saving.

The Trikombin informs you if settings are not compatible with the Diamond Shield Zapper before the sequence can be saved.

7.5.3 Opening the Chip Card Editing Dialogue

Insert the chip card into the USB card reader. Pay attention to the correct orientation of the chip card. It is indicated by a small icon (a chip card with an arrow) on the USB card reader.



1. Plug the USB card reader with the inserted chip card into the USB slot of the Trikombin.
2. Activate the Application Mode by tapping the “Application” tab.
3. Tap on the button “More...”.
4. Tap on “Chip card”. The dialogue “Diamond Shield Chip Card” opens. (If this is missing, the required license was not installed).

Please note: the chip card dialogue will close automatically when the USB card reader is removed. Please ensure, that the USB card reader is not removed while the Trikombin accesses it. This is evident from the fact that the mouse pointer appears as an hourglass.

5. The displayed entries "Save to chip card...", "Save to chip card (Diam. Sh. <2.1)..." and "Chipcard editor" are applied as follows:

7.5.4 Displaying the Frequency Programs of a Sequence

1. Tap on the "Chipcard editor" to open the screen "Diamond shield chip card".
2. Use the rotary encoder to select the desired sequence.
3. Tap on the button "Show content".
Alternatively, you can also use the right arrow key of the keypad or by tapping on the little additional box. With the left arrow key the sequence will be minimised.

7.5.5 Importing a Sequence or a Frequency Program from the Chip Card to the Application List

1. Tap on the "Chipcard editor" to open the screen "Diamond shield chip card".
2. Use the rotary encoder to select the desired sequence.
3. If you want to solely import one frequency program of the sequence, tap the button "Show content" and then select the desired frequency program with the rotary encoder.
4. Tap the button "Add to application" and "Close". The program is added to the application list.

7.5.6 Moving a Sequence

1. Tap on the "Chipcard editor" to open the screen "Diamond shield chip card".
2. Use the rotary encoder to select the sequence that shall be moved.
3. Tap the button "Move". The dialogue "Move via Rotary Encoder" opens.
4. Use the rotary encoder to change the position of the entry.
5. Tap the button "Done" to close the dialogue.

7.5.7 Copying Frequency Programs from the Application List to the Chip Card

The frequency programs of the application list can be copied as a sequence to a chip card. It is indicated, if the application list contains frequency programs that exceed the technical capabilities of the Diamond Shield devices. These programs must be removed or deactivated before copying the list.

1. Depending on the version of the Diamond Shield device, tap either "Save to chip card..." or "Save to chip card (Diamond Shield < 2.1)".
If you do not know the version of the Diamond Shield device, please select the entry for the version < 2.1. (see chapter 7.4.2 *Supported Diamond Shield Devices*).
2. The dialogue "Save chip card sequence" opens.

3. If you want to save the frequency programs as a new sequence:
 - Tap on the field “Name of new sequence”. The touchscreen keypad opens.
 - Enter the desired name of the new sequence.
 - Tap on “Ok” to close the touchscreen keypad.
 - Tap on “Add” to close the dialogue “Save chip card sequence”. The sequence will be saved under the specified name.
4. If you want to replace an existing sequence:
 - Select the desired sequence with the rotary encoder.
 - Tap on the button “Replace existing”. The dialogue “Save chip card sequence” will be closed and the selected sequence will be replaced with the frequency programs of the application list.

Always the entire content of the application list will be saved to the chip card. Entries that shall not be saved must first be removed or deactivated. Select the affected entry via the rotary encoder and tap on the button “Disable” or “Remove”. If you solely want to deactivate or remove one subprogram of a chain, first tap the arrow button to the right and select via the rotary encoder the desired program.

7.6 Working with Libraries

7.6.1 Overview

The Trikombin allows the installation of compatible libraries. These are optional additional licenses that can be purchased from corresponding providers.

For more information on installing libraries, please see chapter *7.1.4 Installing Firmware Updates, Licenses and Libraries*.

A library can be searched by entering search terms. All entries that correspond to the search term entered are then listed.

The frequency programs found can be used both in the Test Mode and in the Application Mode.

Chains of Frequency Programs

To group frequency programs they can be organized in so-called "chains". Chains contain several frequency programs that are used for the same application.

7.6.2 Searching Libraries

Entering a Search Term

1. In the Testing Mode, tap on the button "Libraries" (right side of the screen). The library menu appears on the touchscreen.
2. Tap on the desired library. The touchscreen keypad appears.
 - The button to the left of the space bar ("de" resp. "en") can be used to switch between the German (contains umlauts) and English versions.
3. Start typing the search term. For simplicity you can enter everything in lower case letters
 - As soon as you have entered at least two letters, the first search term is displayed in gray font, starting with the entered letters.
 - You can either continue with the input or use the rotary encoder to scroll through the search terms that begin with the entered letters.
4. When you have found the desired search term, close the dialog by pressing the "Ok" button.

The touchscreen keypad also allows to display all search terms in the library, which *contain* the entered text. In order to do this, tap the button "..." after you entered the search term. A list with all matches appears. Use the rotary encoder to select the desired search term. Tap on "Ok" to close the dialogue.

If you want to list all search terms of the library, then press the button "..." without entering any text.

Selecting a Desired Chain

After entering a search term, the device will display all chains, which are linked to that search term.

The dialogue contains the following elements:

- List “Chain” lists all chains, which are linked to the entered search term.
- List “Programs” lists all programs of the selected chain.
- List “Also for” lists all the other search terms of the selected chain.
- Button “Add” adds the selected chain to the testing screen. A tick mark in the list “Chain” indicates, that the chain was added to the testing screen.
- Button “Remove” removes the selected chain from the Testing Mode.
- Check box “Add only new programs”: Some chains may contain some of the programs, which are used in other chains. When this check box is ticked, then adding a chain will only add those programs to the Testing Mode, which have not already been added.
The default for this check box can be set in the Setting dialogue which can be accessed via the Start Mode.
- Button “Close” will close the dialogue and activate the testing screen.
- Button “Add all” adds all chains displayed in the dialogue to the Testing Mode and closes the dialogue.
- Button “Continue search” will go back to the touchscreen keyboard to continue searching the library.

7.6.3 Using the Selected Chains in the Testing Mode

Via the navigation bar, the chains which have been added to the Testing Mode, can be accessed and used just like other frequency programs.

To select the desired chain, press the far left button in the navigation bar (the button which is also used to select between “an” and “clock”) and then press the corresponding button for the chain.

The frequency programs within a chain can then be selected by pressing the second navigation bar button.

You can add the complete chain or the selected frequency program to the application screen by means of the button “Add program”.

Please note, once a frequency program of a chain was modified, the same modifications will not be adopted for subsequently loaded frequency programs.

7.6.4 Loading a Chain via its Chain Number

Please see chapter 7.2.4 *Options for Directly Loading a Frequency Program*.

7.6.5 Removing a Chain from the Testing Mode

If you want to remove all chains, which have been added to the Testing Mode, proceed as follows:

1. Tap the button “Libraries...”. The menu for the libraries opens.
2. Tap on “Remove all chains”.
3. The device shows a message to confirm that you want to remove all selected chains.
4. Confirm the message by tapping “Yes”.

If you want to remove only *one* chain, which has been added to the Testing Mode, proceed as follows:

1. Tap the button “Libraries...”. The menu for the libraries appears on the touchscreen.
2. Tap on “Selected chains...”. The dialogue “Selected chains” opens.
3. Select the desired chain with the rotary encoder.
4. Tap the button “Remove”.
5. Close the dialogue.

All selected chains will also be removed when a new session is started.

8. Technical Specifications

8.1 General

- 3 independent signal generators, galvanically isolated from each other and galvanically (electrically) separated from the housing (insulation resistance > 10 MOhm)
- Rechargeable battery
 - Duration with fully charged battery: approximately 8 hours
 - Time to charge the battery: approximately 3 - 4 hours
 - Capacity: 9Ah
 - Lifetime: at least 1000 charge / discharge cycles
- 3 removable brass cups with lids over which the signals are routed
- Metal housing
- Built-in computer with 7" touch-display
- Keypad with 35 keys
- Rotary encoder
- External power supply (100 – 240V)

8.2 Connections

- USB slot
- Ethernet socket for service purposes
- Earthing socket
- External foot switch connector

8.3 Characteristics of the Output Signals

- Frequency range: 0.000001 Hz – 20 MHz (up to 36.1 MHz with option "Sublevel 7300").
- Waveforms: square wave and sine wave
- Accuracy of the frequencies: 100 ppm or better
- Output voltage: 0.1 - 16V (peak to peak)
- DC voltage component: 0,
50% of the peak-to-peak voltage,
50% of the peak-to-peak voltage + 0.3V
- Voltage accuracy: $\pm 3\%$ or $\pm 100\text{mV}$ (take higher value) at frequencies < 5MHz

9. Declaration of Conformity



KONFORMITÄTSERKLÄRUNG / DECLARATION OF CONFORMITY

Hersteller / Manufacturer: Mannayan GmbH + Co KG, Unterer Anger 15 / Rgb., 80331 München, Germany

Die Mannayan GmbH + Co KG bescheinigt die Konformität des Produkts / Mannayan GmbH + Co KG herewith declares conformity of the product

Bezeichnung / Productname: Funktionsgenerator / Function Generator **Typ / Type:** Trikombin

mit dem optionalen Zubehör / with the optional accessories:

DTS Testkästen / DTS Testkits

Stoffelektroden / Surface electrodes

Kabel / Cables

Abgreifer für Ampullen / Tapper for ampoules

Handelektroden / Hand electrodes

Becher Gläser / Beaker glasses

Testampullen / Test Ampoules

Rückenelektroden / Back electrodes

Becherelektroden / Cup electrodes

Antenne / Antenna

Fußschalter / Foot switch

Erdungskabel / Earthing cable

mit den folgenden Bestimmungen / with applicable regulations: EMV Richtlinien / EMC Directives:

2004/108/EG;

Elektromagnetische Verträglichkeit / Electromagnetic compatibility:

DIN EN 61326-1; VDE 0843-20-1:2006-10

Elektrische Mess-, Steuer-, Regel- und Laborgeräte - EMV-Anforderungen - Teil 1: Allgemeine Anforderungen

(IEC 61326-1:2005); Deutsche Fassung EN 61326-1:2006

DIN EN 61326-2-6; VDE 0843-20-2-6:2006-10

Elektrische Mess-, Steuer-, Regel- und Laborgeräte - EMV-Anforderungen - Teil 2-6: Besondere Anforderungen

Medizinische In-vitro-Diagnosegeräte (IVD) (IEC 61326-2-6:2005); EN 61326-2-6:2006

Datum / Date: 26.02.2018

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Oliver Spahr

Geschäftsführer / Managing Director

Accessories

Prod.-No.	Product
010363	Trikombin
Updates	
010365	Update Working with chip cards including reader (Chip card functions)
010818	Update Heart rate variability
Accessories	
010378	Tapper for ampules
010379	Cable for tapper with banana plug (red)
010738	BNC-cable
010786	Cable coupling for BNC-cable
010380	Antenna for Trikombin
010374	Cup electrode with lid (brass)
010375	Beaker glass
010783	TRIKOMBIN - EAV device inkl. 1x cable (2 m) with banana plug (blue), 1x Hand electrode for EAV device
010381	One-hand rod - tensor silver, professional set
010825	Mount for one-hand-rod
010383	Earthing cable for Trikombin or Antenna with banana plug (Diamond Shield earthing cables are not suitable!)
010382	Foot switch, 3 pedals
010370	Hand electrode, stainless steel
010823	Hand electrode for EAV device
010742	Back electrode, threefold with 3 banana plugs
010805	Replacement protective cover for back electrode
	Textile surface electrode with connecting cable (280 x 300 mm, 150 x 40 mm, 350 x 40 mm, 350 x 100 mm, 550 x 100 mm, 500 x 300 mm or 600 x 400 mm)
010256	Textile surface electrode (custom-made according to your individual dimensions, with connecting cable) (Attention: extended delivery times should be considered!)
	Cable (2,5 m) with connector adapter for textile surface electrodes (blue, green or red)
	Cable blue, green or red, 2 m with banana plug for Trikombin
010377	Cable black 1,50 m with Banana plug for Trikombin
010376	Cable black 30 cm with Banana plug for Trikombin
010792	Loudspeaker with BNC connector
010385	Master Chipcard Universal - blank for Diamond Shield, Trikombin and Healing Frequency, 58 Slots
010386	Big Master Chipcard Universal - blank for Diamond Shield, Trikombin and Healing Frequency, 127 Slots
010263	USB chipcard writer
010387	Mineralvit Gold-drops (amount 50 - á 10 ml) in a carton

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