The Frequency Synthesizer F-SCAN²

SW Version FS2105

INSTRUCTION MANUAL

This symbol identifies the equipment as type B

ATTENTION: Consult accompanying documents

WARNING:	**User's with PACE MAKERS or PACE MAKER ELECTRODES should consult a cardiologist prior to use of these devices. The devices could perhaps interfere with – or even damage – the PACE MAKER.**

NOTE:	The device, all accessories, connectors and cables must be visually inspected for damage frequently. A complete functional test must be performed and documented by a professional once a year.

NOTE:	The universal power supply shipped with the device is the only safe one to be used. Any other power source could damage the *F-SCAN²* or become a hazard for the user.

NOTE:	The device generates frequencies. The use of cables, adapters or accessories other than the ones supplied or recommended by the manufacturer could cause malfunctions in other appliances.

NOTE:	The device's integrated functions allow the performance of biological tests and applications described by the author Dr. H.R.CLARK. They are also suitable for applications commonly named after R.R.RIFE. The device is used under the sole responsibility of it's operator WITHOUT LIABILITY TO THE MANUFACTURER.

Introduction

The FREQUENCY SYNTHESIZER ***F-SCAN²*** has been optimized for stationary as well as 'out of office' use by medical professionals and healing practitioners. The device advances and expands the range of applications originally defined by it's predecessor, the F-SCAN. These enhancements – and the new mode of operation – reflect the years of our experience in the field and the ongoing valuable information exchange with our distributors and our customers.

The device generates precise SINE wave signals (completely DC-OFFSET) and SQUARE wave signals (FULL WAVE or DC-OFFSET) and feeds them to a single OUTPUT connector.

A separate "PowerPort" provides amplified signals synchronized with the signals available on the OUTPUT port for use with light or coil adapters, etc.

The AMPLITUDE of the sine wave signals is preset. The amplitude of the square wave signals can be individually adjusted in a broad range.

The special application modes "**WOBBLE**" and "**PULSE**" and a TIMER can be assigned individually to each frequency.

A "**S**weep **T**o **N**ext" mode allows a sweep between two adjacent values in a sequence of frequencies.

The unique **DIRP** (**D**ual **I**ntegration **R**esonance **P**rocedure) can be used to SCAN FOR RESONANT FREQUENCIES in the unit's frequency band.

A WIDE BAND **SWEEP** can be performed.

A **ZAPPER** session is preprogrammed and can be started with a touch on the ZAPP icon.

All functions are controlled by a microprocessor. The built-in permanent (non volatile) memory contains a list of the 235 pathogens identified by Dr. Hulda R. CLARK (called CLARK table in this document) with their typical frequencies as well as a list of 350 low frequency applications (called RIFE table in this document).

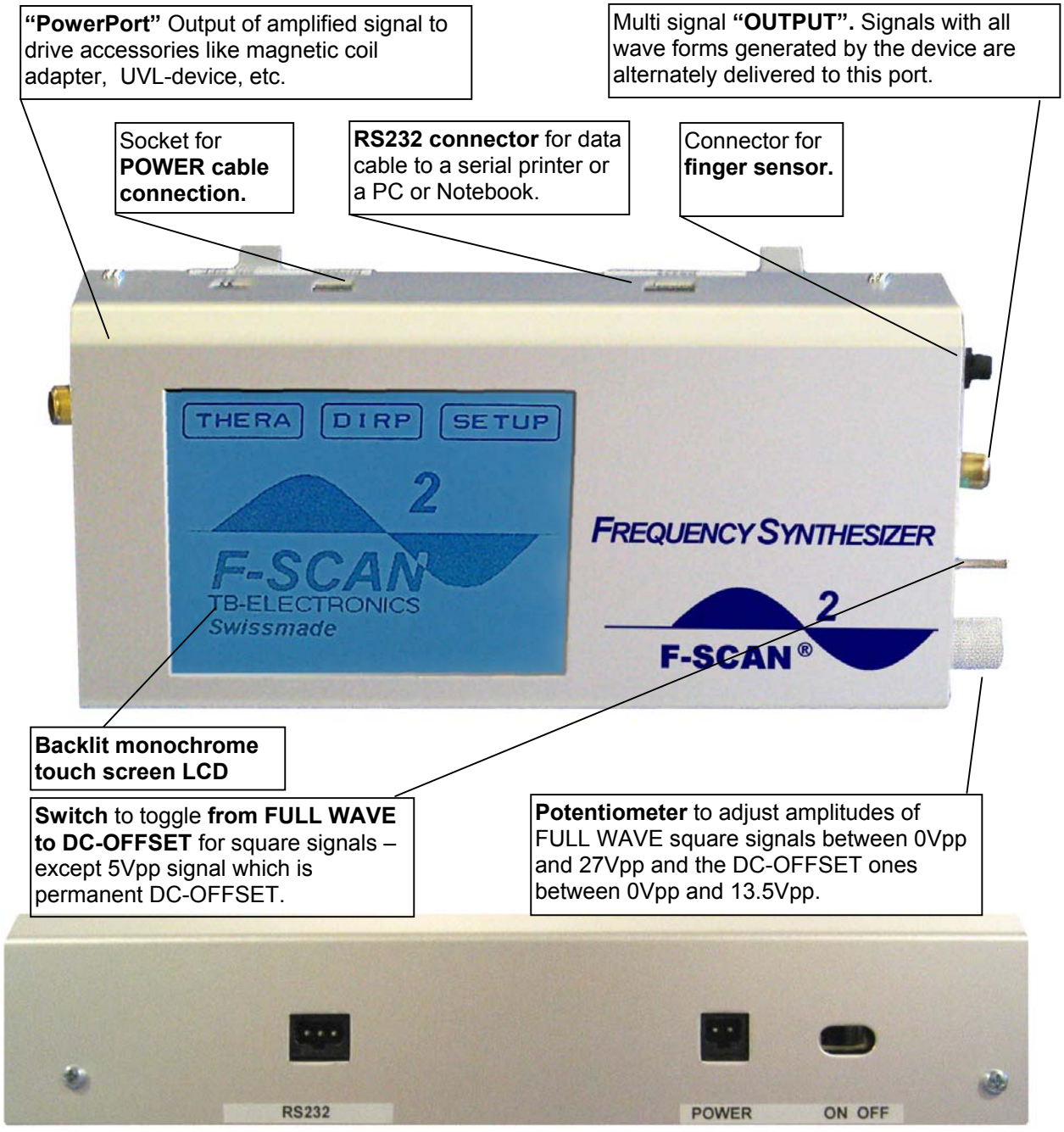
Options, spare parts and accessories available from the factory are covered in this manual.

Table of contents

Product highlights

- The *F-SCAN*^{2} is **operated by a backlit monochrome LCD touch screen** display of 320 x 240 pixels. Touch commands are executed instantaneously which reduces setup times.
- **A single OUTPUT port** on the right side of the device can be programmed and provides sine-, square- and square 5Volt- signals.
- **Square wave signals can be delivered FULL WAVE or DC-OFFSET** – selectable with a switch. Their amplitude can be adjusted with a potentiometer between 0Vpp and 27Vpp or 13.5Vpp.
- **A "PowerPort"** on the left side of the device provides amplified square wave signals synchronized with the signal available on the OUTPUT port for use with light or coil adapters, etc. The output range is from 0.1Hz to 1MHz with a fixed amplitude of 14Vpp.
- **Two frequency tables are permanently stored** and items can be selected by index number, or with a touch on an alpha sorted name table, and transferred to the operating memory.
- Frequency values between **0.1Hz and 6,000,000.9Hz** can be set **for square wave signals** and between **0.1Hz and 15,000,000.9Hz for sine wave signals**.
- Integrated adjustable common and multiple individual **TIMER.**
- '**SWEEP**' – mode, for wide band application of frequencies.
- '**S**weep **T**o **N**ext**'** – mode**,** allows to sweep between any two values of a frequency sequence.
- **User accessible memory** provides a capacity to **store 50 data blocks** permanently (until an overwrite). **Each data block can be comprised of up to 50 frequencies** (with one decimal, if required), their assigned signal form and the '**S**weep **T**o **N**ext' – choices (if applicable) **and a complete data set of a DIRP run** (max. 1,000 analysis steps).
- **Some user settings remain** after power off until the user changes them again.
- **DIRP** (a special SCAN – procedure) to detect resonances within the frequency range of the device.
- The results of a **DIRP – analysis** are **displayed as a graph** on the touch screen display (up to 1,000 increments).
- '**WOBBLE'-** feature. If enabled, the signal will swing around the active frequency in a band selectable in **27 steps between ±10Hz and ±9000Hz** .
- **'PULSE'-** feature. **4 pulse rates** selectable.
- **'*F-SCAN*'** software is delivered with the device. It allows to remote control the *F-SCAN*^{2} from a PC or Notebook via the RS232 communication interface. A serial printer can be attached instead of a PC. The content of the operating memory, the DIRP data set, the DIRP graph, or the content of 'SETUP window 1', can be printed to keep as a record.

Elements for operation

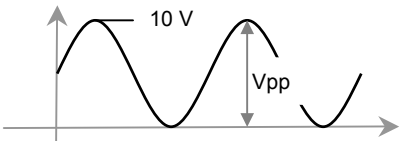


Rear view of housing (legs not shown)

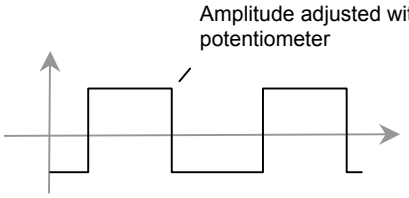
Left side panel (legs not shown)

Right side panel (legs not shown)

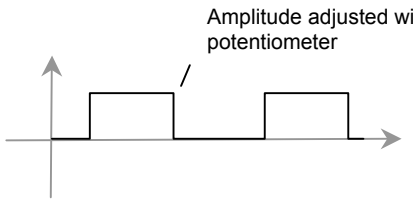
Signals available on the “Output” connector



SINE wave signal



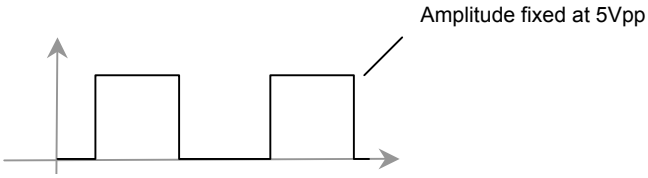
SQUARE FULL WAVE signal
Switch in top position



SQUARE DC-OFFSET signal
Switch in bottom position

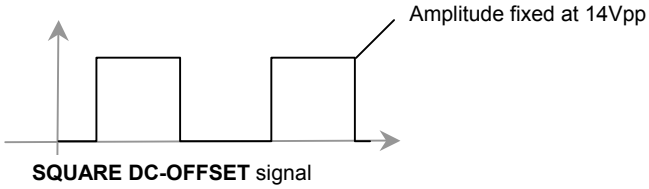
Amplitude of square wave signals in relation to position of potentiometer is linear!

CAUTION: When using square wave signals, the output voltage (amplitude) must be carefully adjusted to the user’s sensitivity. See chapter **Adjustment of amplitude**



SQUARE DC-OFFSET signal

Signal available on “PowerPort”



SQUARE DC-OFFSET signal

CAUTION: Polarity of “PowerPort” is opposite of “OUTPUT” !!!

Any connection between the two output ports causes a short which may damage the device and/or the power supply !!!!

Memory capabilities built into the *F-SCAN²*

The fairly large library functions containing the CLARK table of frequencies of pathogens and the RIFE table of sequences of frequencies - addressing disease symptoms – are fixed in permanent memory and cannot be altered by the user.

User controlled settings of the TIMERs, the upper ("F MAX") and lower ("F MIN") frequency limit's and of the "Delta F" remain - even when the unit is turned OFF - until the user changes them to other values.

The operating memory, which is used by all functions, remains active as long as the device is powered up. This is called a volatile, or non-permanent, memory. It's content is lost when the power is switched OFF.

It's content can be erased too from the SETUP window 1 with "STORE" followed by 'E'.

The operating memory is organized as follows:
It has fifty positions labeled '01' to '50'. Any value is entered into position '01' unless the icon "MEMO" is touched after the confirming 'E'. The memory position counter changes to '02' and is ready for the next entry.

It is important to observe the content of the operating memory if different functions are performed in succession without separating them by 'power OFF'. Values stored in the operating memory with the INPUT OF A FREQUENCY, TRANSFER, RECALL or after selecting a CLARK application, are automatically appended.

Playback from the operating memory always starts from memory position '01'.

Which function to use ?

Let us assume that.....

….a well founded diagnostic method names one or several pathogens as the cause for a disease. A check of the attached list of pathogens identified by **Dr. CLARK** reveals that all are covered in the list.

See chapter USE OF THE INTERNAL FREQUENCY TABLES to proceed.

….there is reason to believe that resonances not yet identified by other diagnostic methods take part in causing disease symptoms. An attempt should be made to find them with a **DIRP** analysis and to treat.

See chapter DIRP to proceed.

….there are symptoms of a health disorder which can be precisely named. A check of the attached list of **RIFE** disease symptoms reveals that the disorder is named.

See chapter USE OF THE INTERNAL FREQUENCY TABLES to proceed.

….the name of the health disorder is NOT in the attached list of RIFE disease symptoms. Other sources however offer a **SEQUENCE OF FREQUENCIES** to treat the disorder which shall be used.

See chapter INPUT AND USE OF FREQUENCIES to proceed.

….an attempt to do a DIRP analysis did not yield trustworthy results. It is conceivable that a 'wide band **SWEEP'** prior to another DIRP may improve the situation.

See chapter WIDE BAND SWEEP to proceed.

….the **ZAPPER** function shall be used.

See chapter ZAPPER to proceed.

General comments

The unit confirms activities acoustically. This fact will not be mentioned in the detailed description of the functions. Sound and display light can be switched ON and OFF.

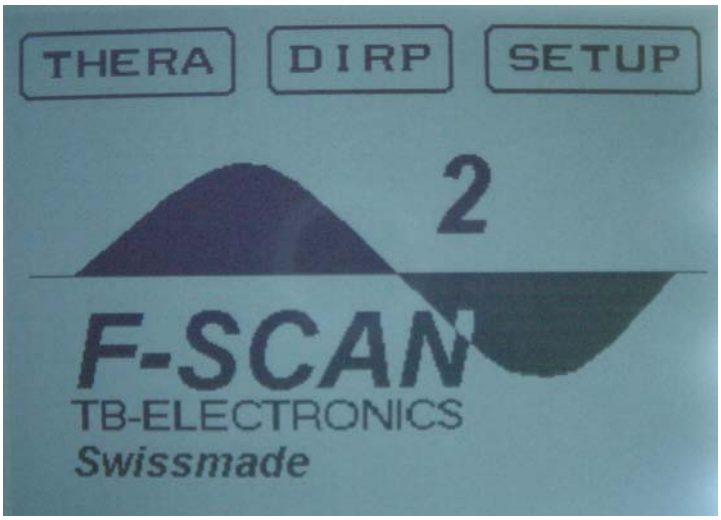
The power supply warms up slightly during operation.

Connect the gold plated handheld electrodes – or other application parts - with the BNC-connectors of the application cable. Place the electrode on the red lead in the user's left hand and the one on the blue lead in his right hand, or apply other electrodes where you see fit.

NOTE: The term SQUARE WAVE is used in this document instead of RECTANGULAR WAVE which is more commonly used in Europe.

How to start the *F-SCAN²*

The unit is ready for use as soon as the power supply is connected to an outlet, the plug attached to the socket POWER and the ON OFF switch on the rear panel set to ON.



This 'Start-up' window is displayed after power ON. It shows the unit's name and the company of origin.

The window offers the 3 tabs THERA, DIRP and SETUP to touch in order to prepare the device for an application.

The TOUCH SCREEN

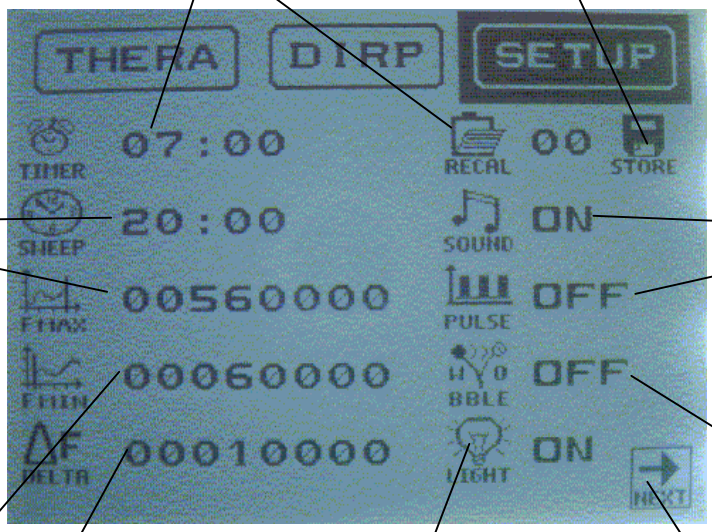
SETUP ***has been touched to display it's window 1.***

Touch to display the numerical block to enter a value for the common"**TIMER**" for frequencies. The same window allows you to assign individual time elements to each frequency of a set. This will be explained on the next page.

Touch to display the numerical block to enter a number between '01' – '50' to **recall a data block** (Frequencies and/or a DIRP data set).**previously stored.**

Touch to display the numerical block to enter a number between '01' – '50' to **store a data block.** (Frequencies and/or a DIRP data set). Touch '**E'** on the numerical block in position '00' to erase all values from the operating memory.

Touch to display the numerical block to enter a value for the separate **timer for the broad band "SWEEP".**



Touch to toggle the **beep** which confirms each input or completed operation **ON or OFF**.

Touch to display the numerical block to enter a value for "**F MAX**", which is the upper frequency limit for a DIRP or a broad band SWEEP.

Touch to select one of **4 PULSE rates**; 5, 10, 15 or 20 pulses per second.

Touch to select one of **27 WOBBLE ranges** between ±10Hz and ±9,000Hz

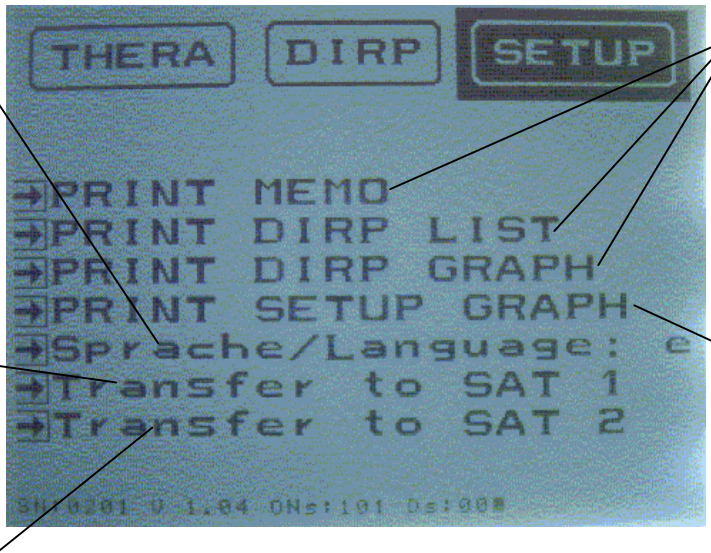
Touch to display the numerical block to enter a value for"**F MIN**" which is the lower frequency limit for a DIRP or a broad band SWEEP.

Touch to display the numerical block to enter a value for "**DELTA F**" which is the size of each step taken during a DIRP or a broad band SWEEP.

Touch to toggle the touch screen panel's **backlight ON** or **OFF**.

Touch to display **window 2 of the tab SETUP.**

The button NEXT in window 1 of the tab SETUP has been touched to display window 2.



Touch to **switch language** of name tables from German to English and vice versa.

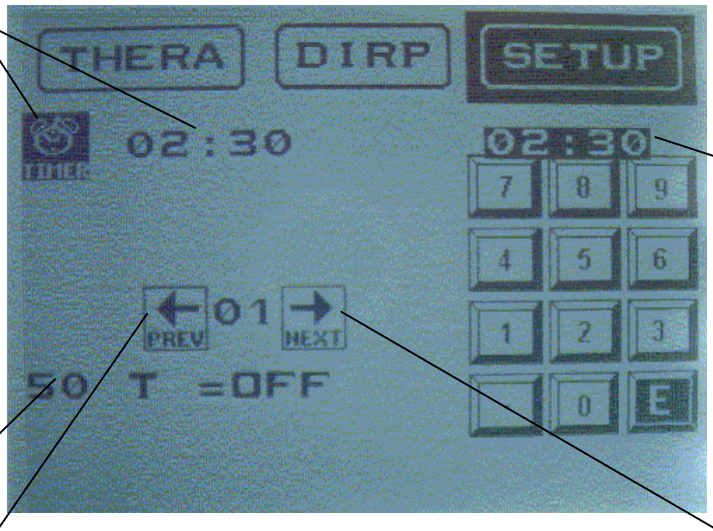
Touch to **transfer the content of the operating memory to an F-SCAN** via the RS232 interface.

Touch to **transfer the content of the operating memory to an *F-SCAN²* – *SAT*** via the RS232 interface.

Touch to **print** either the **content of the operating memory**, or **all data of a DIRP run,** or **the DIRP graph on a serial printer** attached to the RS232 socket of the device.

Touch to **print settings of SETUP window 1 on a serial printer** attached to the RS232 socket of the device.

The icon  ***in window 1 of the tab SETUP has been touched.***



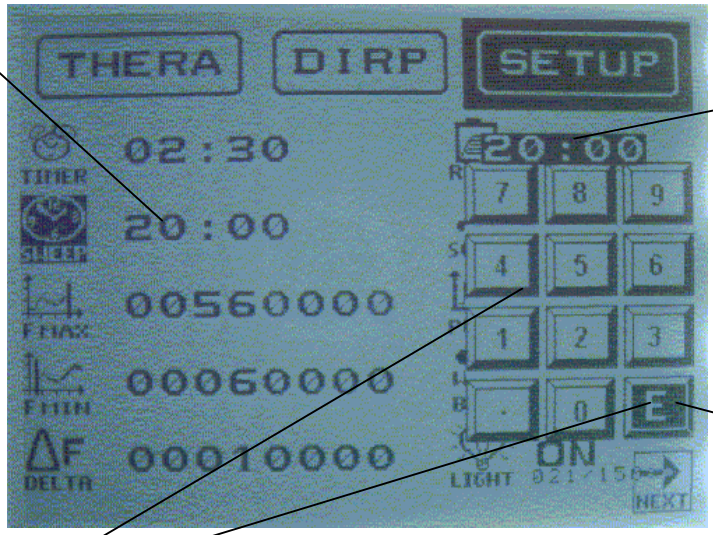
The icon's black background signals that it has been selected. The time field to it's right shows the present setting and changes to the new one after the seconds are confirmed with '**E**'.

Touch to toggle the "**50 TIMER** "-feature ON and OFF.

This time field shows the present setting and changes to the new minute and/or second value entered after confirmation with '**E**'.

Touch the left or right arrow to move between memory positions '01' to '50'. **A time element entered in position '01' is valid for all frequencies of a set. If individual time elements are needed, they can be assigned to the memory positions corresponding to the frequencies held**. The "50 TIMER"-feature must be ON to activate individual TIMERs for an application.

The icon – TIMER has been touched.



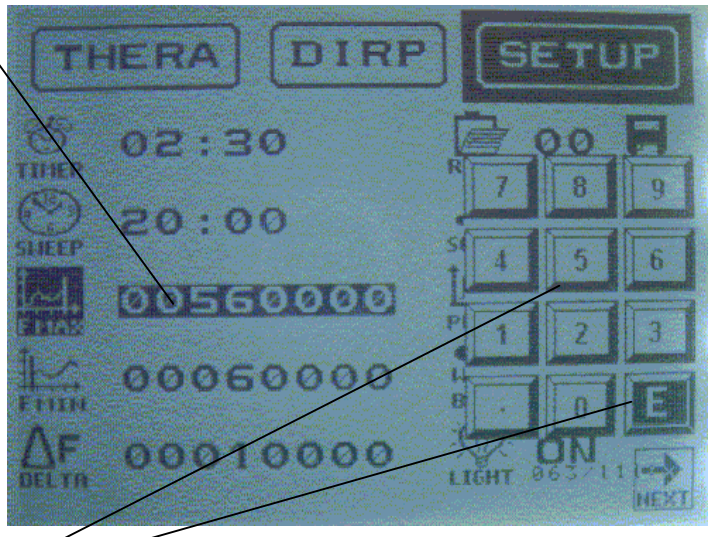
This field shows the **present time for a SWEEP** in minutes and seconds. It changes to new values as soon as a new entry for seconds has been confirmed with '**E**'. The numerical block disappears and the icon's background changes from active to inactive.

This field shows the present time for a SWEEP in minutes and seconds. It's background changes from active to inactive as soon as new numbers have been entered and confirmed with '**E**'.

Enter a new value for minutes first and touch '**E**' to jump to seconds, change and confirm with '**E**'. Touch '**E**' without an input if you want to keep the present setting of either the minutes or the seconds.

The icon has been touched.

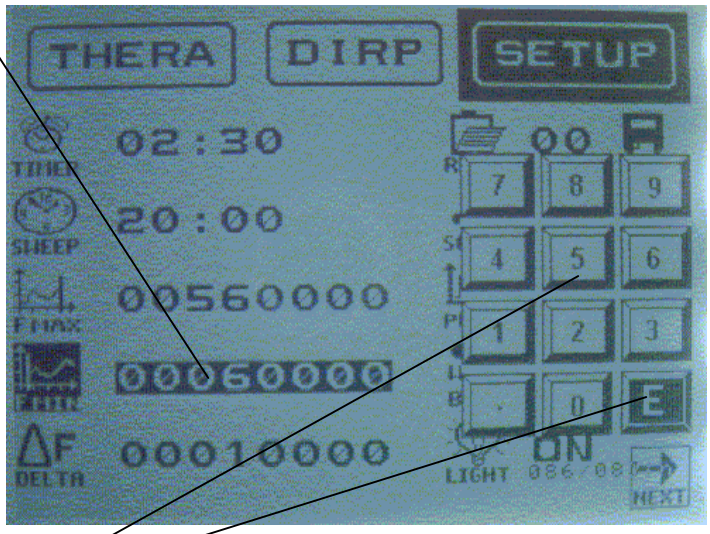
This field shows the present setting in Hz for the **upper frequency limit** "**F MAX**" for a broad band SWEEP or for a DIRP. It changes as soon as a new value has been entered with the numerical keys and is confirmed with '**E**'. The numerical block disappears and the background of field and icon changes from active to inactive.



Enter a new frequency value and confirm with '**E**'. In case of an input error touch zero until all 8 digit's on the left are filled with zero. Then input the correct value. The value must be higher than "F MIN".

The icon  ***has been touched.***

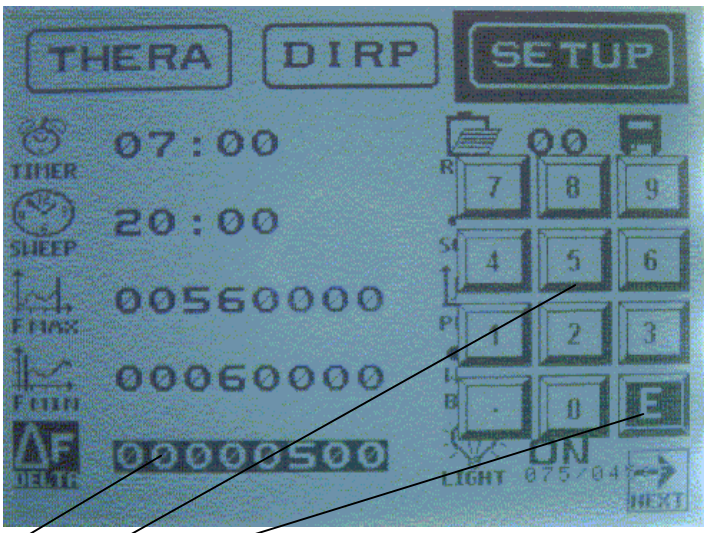
This field shows the present setting in Hz for the **lower frequency limit** "**F MIN**" for a broad band SWEEP or for a DIRP. It changes as soon as a new value has been entered with the numerical keys and is confirmed with '**E**'. The numerical block disappears and the background of field and icon changes from active to inactive.



Enter a new frequency value and confirm with '**E**'. In case of an input error touch zero until all 8 digit's on the left are filled with zero. Then input the correct value. The value must be lower than "F MAX".

The icon  ***has been touched.***

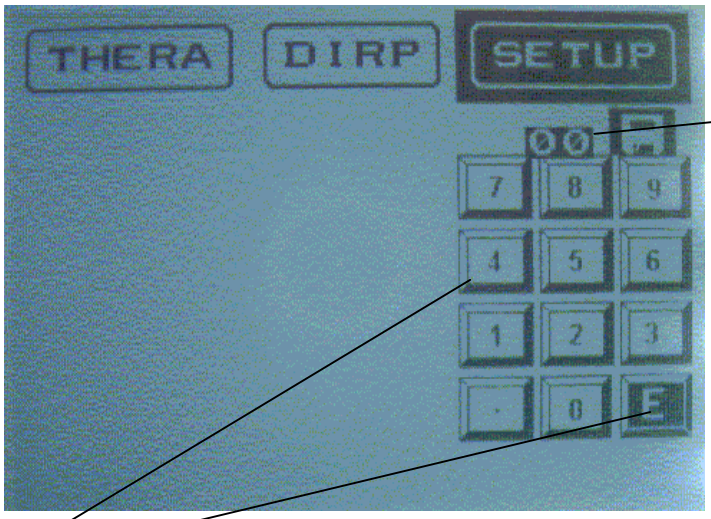
This field shows the present setting in Hz for the "**DELTA F"** for a broad band SWEEP or for a DIRP. It changes as soon as a new value has been entered with the numerical keys and is confirmed with '**E**'. The numerical block disappears and the background of field and icon changes from active to inactive.



Enter a new frequency value and confirm with '**E**'. In case of an input error touch zero until all 8 digit's on the left are filled with zero. Then input the correct value. The value must be within the range between "F MAX" and "F MIN".

The icon 

has been touched.

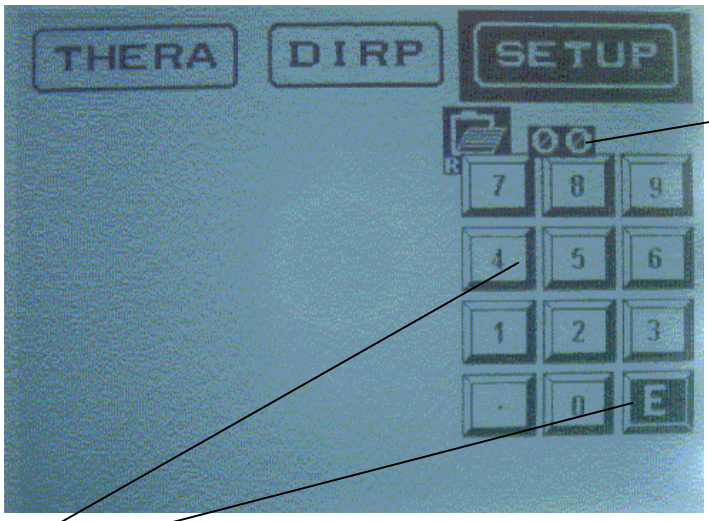


This field shows the present position ‘00’ of the permanent memory.

If a number between ‘01’ and ‘50’ is entered and confirmed with ‘**E’**, **a set of frequencies, or a DIRP data set with the frequencies selected for therapy, will be transferred from the operating memory to permanent memory**.
Touch ‘**E’** in position **‘00’** to erase all values from the operating memory.
Touch ‘**E’** in position **‘99’** to restore all default settings into the device.
Touch ‘**E’** in position **‘98’** to erase all entries from the 50 positions of the permanent memory (this may take up to 10 minutes!).

The icon 

has been touched.

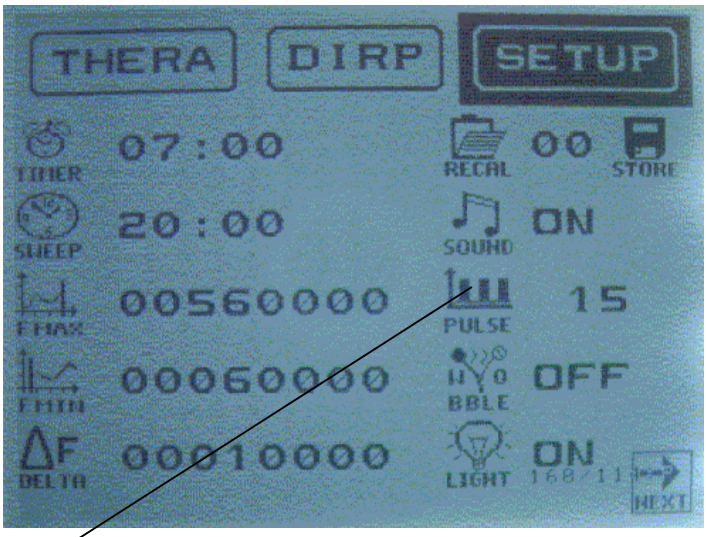


This field shows the present position ‘00’ of the permanent memory.

If a number between ‘01’ and ‘50’ is entered and confirmed with ‘**E’**, **a set of frequencies - or a DIRP data set with the frequencies selected for therapy - previously stored, will be recalled to the operating memory**.
Note that a DIRP overwrites the values for “F MIN”, “F MAX” and “DELTA F” temporarily.

The icon 

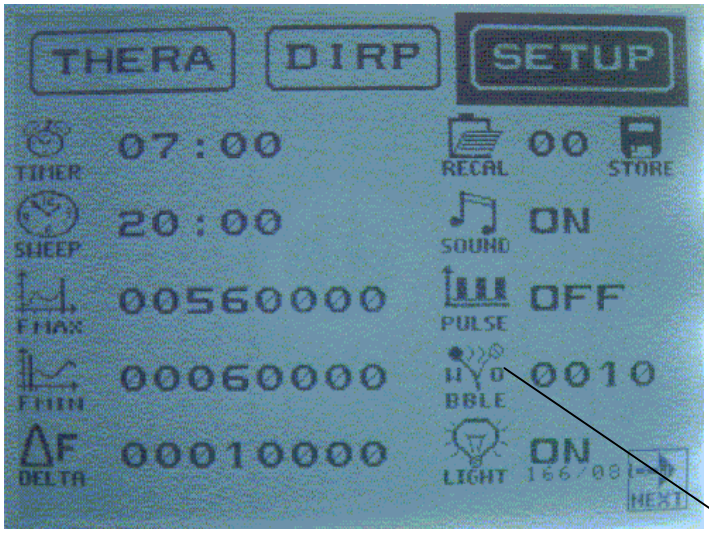
has been touched.



The icon „PULSE“ offers 5 positions, the pulse rates 5, 10, 15 or 20 (per second) and OFF. Pulsing resets to OFF whenever the device shuts down.

The icon 

has been touched.



The icon „WOBBLE“ offers 27ranges and the OFF position. (± 10 to 90Hz, 100 to 900Hz, 1,000 to 9,000Hz.) The selected range remains active until the feature is set to OFF with a continuous touch on the icon. The same procedure must be followed to change from a higher to a lower range or to change a wrong entry.

The tab THERA ***(for THERAPY) has been touched to display it's window.***

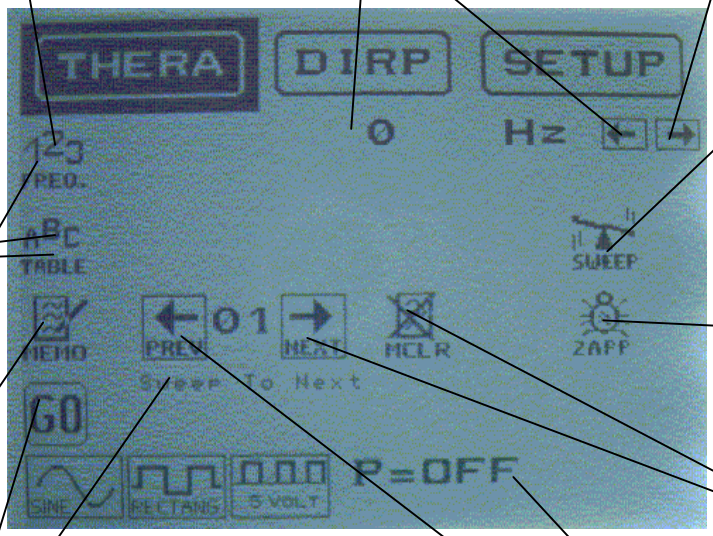
Touch to display the numerical block to **enter a Frequency value** in the operating range of the device between 0.1Hz and 15,000,000.9Hz.

The **Frequency value** entered last, or active in any function, is **displayed** in this field.

Touch to **decrease the actual frequency value** in increments of "DELTA F" set in the window SETUP.

Touch to **increase the actual frequency value** in increments of "DELTA F" set in the window SETUP.

Touch first the "1 2 3"-icon, then the "A B C"-icon, to display a separate window with the numerical block to **input an index number** to select from the internal tables.



Touch to **start the broad band SWEEP**. A separate window is displayed which will be shown later.

Touch to **start a ZAPPER session**. A separate window is displayed which will be shown later.

Touch to **display a** separate window with alpha sorted **name lists** to select from the internal tables.

Touch to clear the memory position shown between the arrow icon's.

Touch to **enter** the active frequency **into** a free position of the **operating memory**.

Touch to **switch to a higher memory position** which will be shown between the arrow icon's.

Touch to **send** the **active frequency to the output ports** (the PowerPort has a limited range). The background of the icon changes to black and it's label from GO to STOP.

Touch to **activate the special feature** "**S**weep **T**o **N**ext". It can be used between any two adjacent frequencies stored in the operating memory. It has to be activated in the position of the lower of the two frequencies. The time assigned to this frequency determines the duration of the Sweep.

Touch to **switch to a lower memory position** which will be shown between the arrow icon's.

For information only. **The "PULSE" feature is OFF**. If it had been set in the window SETUP the pulse rate would be shown here.

Wave form selection 

Touch to **select a sine wave output signal, completely DC-OFFSET, with a fixed amplitude of 10Vpp.**
The internal software activates this signal form at the start of an application if no other signal form has been selected by the user.

Touch to **select a 'FULL WAVE' square output signal**. The amplitude can be adjusted with the potentiometer between 0 and 27 Vpp. If the switch next to the potentiometer is set to it's bottom position, the output signal changes to **DC-OFFSET**. The amplitude can then be adjusted with the potentiometer between 0 and 13.5 Vpp.
ALWAYS TEST A USER'S SENSITIVITY PRIOR TO AN APPLICATION OF SQUARE WAVE SIGNALS (not required for a ZAPPER session).
See chapter **Adjustment of amplitude**

Touch to **select a square wave output signal, completely DC-OFFSET, with a fixed amplitude of 5Vpp.**
The internal software activates this signal form at the start of a ZAPPER session.

The icon's for wave form selection have a toggle function. Press once to activate, press again to deactivate, and so on. Selection of a wave form is mandatory after entering a random frequency or when using the memory function.

Example: The frequency 1,000Hz shall be sent to the output as a square signal:

1 & **0** & **0** & **0** & **E**

To deactivate the output press 

again.

The user can switch between wave forms any time.

The tab DIRP ***has been touched to display it's window.***

The frequency value sent from the device during a DIRP is displayed here.

The horizontal line can be moved vertically within the graph field with the up and down arrows CL (**C**lipping **L**evel). All values of the graph touching or passing this line can be transferred for further use to the operating memory with a touch on the icon "TRANS".

Touch to CLEAR the graph field without deleting the data from the operating memory

Touch to REDRAW the graph.

The resonance feedback (MV) to the frequency value issued by the device is stored in the operating memory and displayed on the graph.

Touch to TRANSFER resonant values selected with the horizontal line (CL) to the operating memory.

Touch to **start the DIRP.**
The background of the icon changes to black and it's label from GO to STOP.
(This DIRP was interrupted for the purpose of taking the picture.)

The Conductivity Value (CV) in % is displayed here. The distance of the horizontal line from the x-axis (CLIP=028) is shown on the right and the Measured Value (MV) underneath the CV.

"F MIN" and "F MAX" set in window 1 of the tab SETUP are shown under the horizontal axis of the graph.

ADJUSTMENT OF AMPLITUDE

Low frequencies with high amplitudes can cause discomfort, skin irritations or even burns, especially if inadequate electrodes or worn self adhesive pads are used.
F-SCAN2 can generate square wave signals with amplitudes of up to 27Vpp with the potentiometer fully open.

WE STRONGLY RECOMMEND THAT THE AMPLITUDE BE SET CAREFULLY PRIOR TO A THERAPY WITH LOW FREQUENCIES.

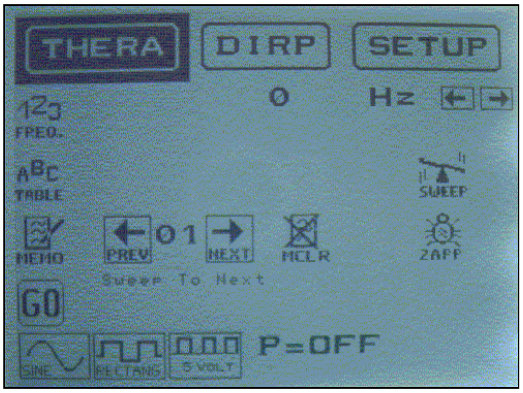
This can be done as follows:

Turn the knob of the potentiometer counter clockwise to '0'.

Attach an application cable to the 'OUTPUT" connector and to the electrodes to be used.

Connect the power supply to an outlet, attach the plug to the socket POWER and set the switch in the back panel to ON.

The 'Start-up' window is displayed. Touch the tab THERA.



Touch "1 2 3" to display the numerical block.

Input 100(Hz) and confirm with 'E'.

Select the square wave signal.

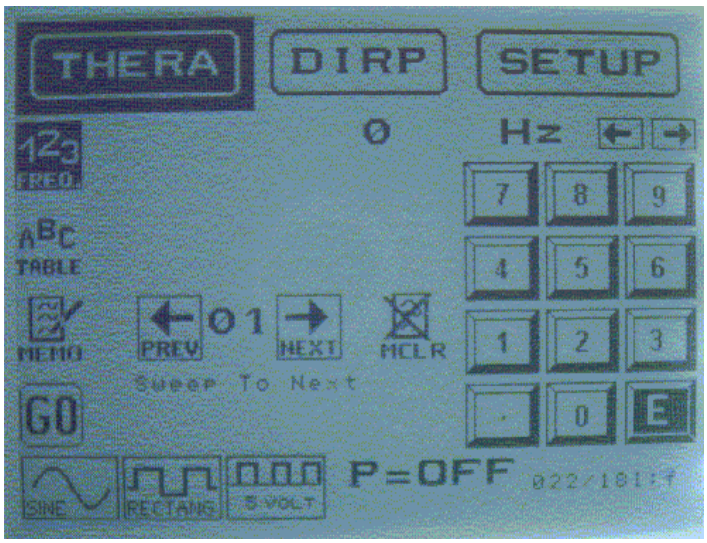
HAND THE ELECTRODES TO THE USER.

TURN THE DIAL OF THE POTENTIOMETER SLOWLY CLOCKWISE (UP) UNTIL THE USER REPORTS 'FEELING THE CURRENT FLOW' - OR 'A SLIGHT VIBRATION IN HIS HANDS' - WHICH HE CAN EASILY TOLERATE.

REMOVE THE ELECTRODES UNTIL READY FOR TREATMENT. MAKE SURE NOT TO CHANGE THE SETTING OF THE POTENTIOMETER FOR THIS USER.

INPUT AND USE OF FREQUENCIES and selection of variables.

The icon "1 2 3" has been touched.



The frequency field shows '0', the numerical block await's an input of a frequency value within the operational range of the device between 0.1Hz and 15,000,000.9Hz.

Each digit entered appears in the frequency field for review. In case of an error enter zero in all 8 digit's and start anew. Confirm the correct value (example 1,000Hz) with 'E'.

The arrows above the numerical block can be used to raise or lower the frequency value displayed in increments of "DELTA F" set in window 1 of the tab SETUP.

If you want to use one frequency only, first touch the desired signal form (example FULL WAVE square) and then the icon "GO".

The signal is delivered on both output ports for the time (example 02 : 30) set in window 1 of the tab SETUP. **The display shows**:

1,000Hz in the frequency field.

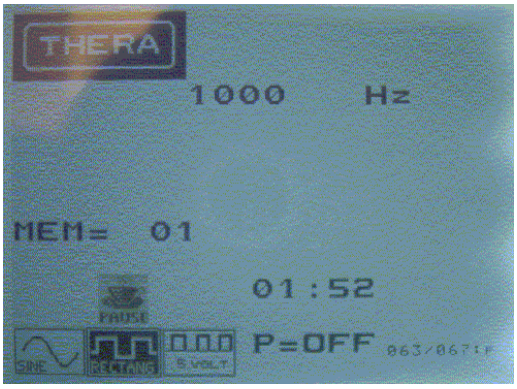
Position '01' of the operating memory.

A "STOP"-icon. A touch stops delivery.

A "SKIP"-icon. A touch stops delivery, since there is no second frequency to skip to.

The TIMER counting down from the original 02 : 30, now at 02 : 02.

The signal form selected (black background) and the PULSE – feature = OFF.

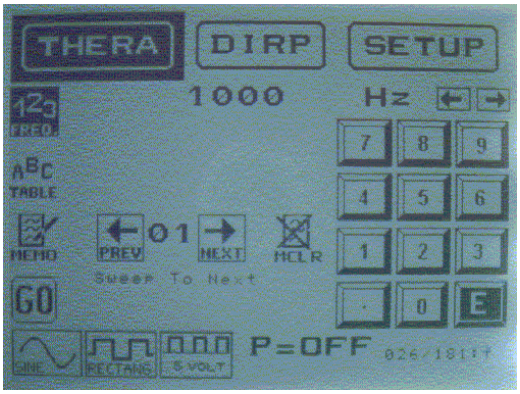


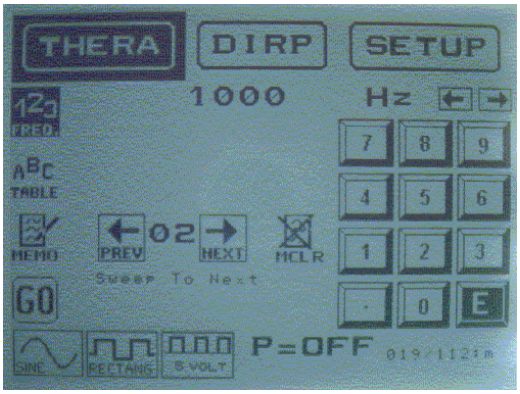
If the icon "PAUSE" is touched, it flashes, delivery stops and the icon's "SKIP" and "STOP" disappear. The TIMER, now at 01 : 52, stops too.

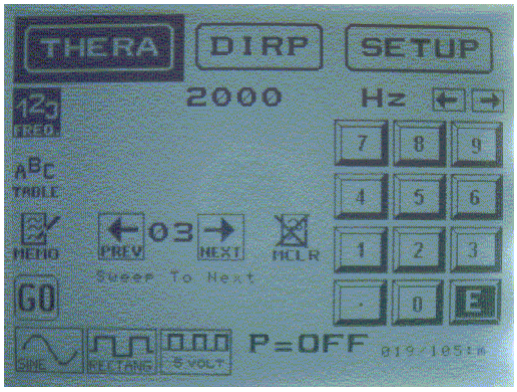
Delivery continues if "PAUSE" is touched again. The icon's "STOP" and "SKIP" reappear.

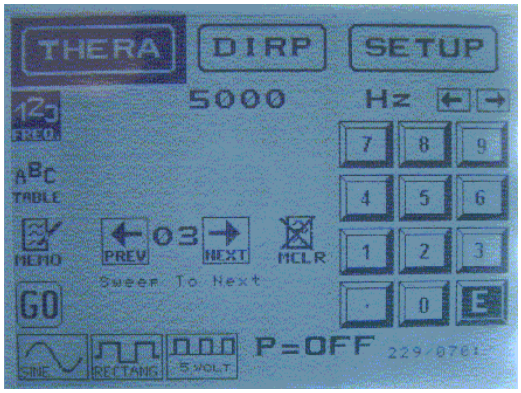
When the TIMER ends the display changes back to the window of the tab "THERA". The icon "1 2 3" is touched again.

Continued on next page!









If a sequence of frequencies with square wave form should be entered (for example 1,000, 2,000 and 5,000Hz), the MEMO function can be used to input the whole sequence.

- select the wave form by touching RECTANG
- select “143” for numerical input
- input <1>, <0>, <0>, <0>, <E>
- press MEMO to store 1,000Hz. This frequency now occupies memory position ‘01’. The memory counter opens position ‘02’.
- input <2>, <0>, <0>, <0>, <E>
- press MEMO to store 2,000Hz. This frequency now occupies memory position ‘02’. The memory counter opens position ‘03’.
- input <5>, <0>, <0>, <0>, <E>. This frequency is stored in memory position ‘03’ without touching MEMO, since it is the last value and no further memory position needs to be prepared.

It is possible to check the input of the frequencies with the icon’s “PREV” and “NEXT”.

If you want to sweep in the range between value 2 and 3 (in our example 2000 to 5000) go to memory position ‘02’ and touch the line “Sweep To Next”. The device calculates the steps for the sweep and performs it for the time assigned to memory position ‘02’.

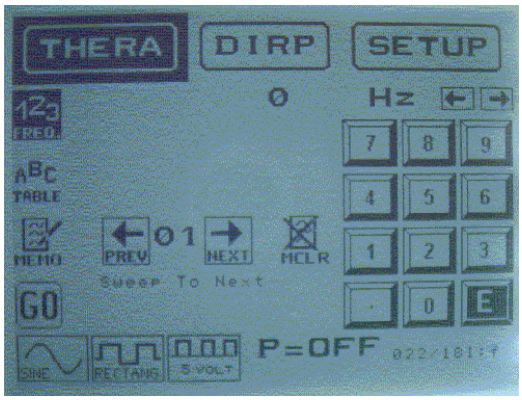
If you want to sweep longer than the time assigned to an individual frequency:
Touch the tab SETUP.
Touch the icon “TIMER”.
Touch ‘50’ to switch the “50 TIMER”-function ON.
Touch the icon “PREV” until the memory position counter shows ‘02’.
Enter the new time and confirm with ‘E’.

Touch the tab THERA.

Touch the icon “GO” to play back the content of all memory positions with a frequency value greater than 0.

USE OF THE INTERNAL FREQUENCY TABLES

The user wants to input an index number to call an item from the internal frequency tables to the operating memory. The window* THERA *is displayed and the icon "1 2 3" has been touched.

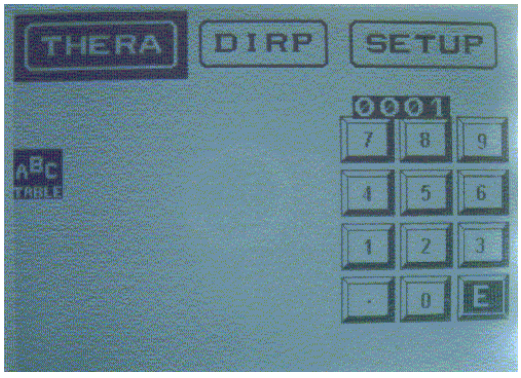


Touch the icon "A B C".

The display changes to the 2nd image below.

The numerical block is displayed and the field for the index number above it offers the position '0001'of the Rife table. Enter any index number between 2 and 350 and confirm with 'E'. (Touch 'E' right away if you wish to work with index number 1 of the Rife table.)

If you want an index number from the Clark table you have to enter a leading 9 (enter 9180 to call the index number 180 and confirm with 'E').



The display changes to the 3rd image below.
The device offers to apply any frequency from the Clark table with sine wave signals and sequences of frequencies from the Rife table with square wave signals (not shown on image 3).

The name associated with the index number called is displayed next to the icon "A B C". If several items are called in sequence the name of the last one will be shown.

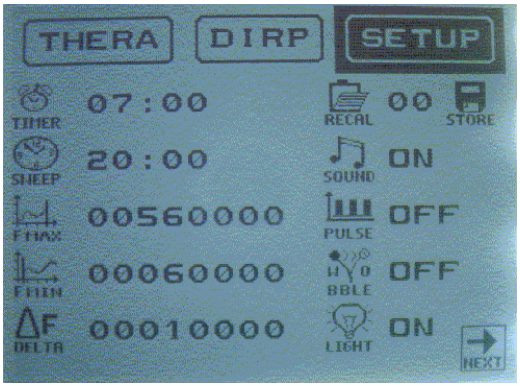
If several items are wanted for one application go through the routine a second time or several times (the operating memory can hold up to 50 frequency values at a time):
Touch the icon "1 2 3".
Touch the icon "A B C".
Enter and confirm the index number.

Touch the icon "GO" to start the application.

REMEMBER: Do not forget to adjust to the user's sensitivity for RIFE applications !!!

NOTE: if the number of selected frequencies is higher than 50, the message MEMO FULL appears in the bottom line and indicates that no more frequencies can be accepted.

Continued on next page!



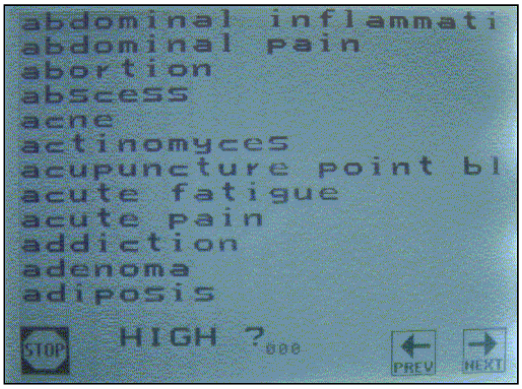
The image on the left shows window 1 of the tab SETUP.

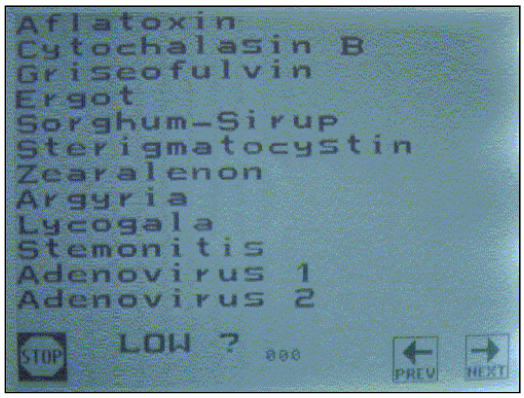
If the “50 TIMER” feature is needed to assign individual time elements to positions of the operating memory, or to change the time for all positions, the input starts here.

Likewise if the special features “PULSE” or “WOBBLE” should be selected and activated for the application.

After activation go back to the tab THERA and start the application with “GO”.

The user wants to call an item from the internal frequency tables to the operating memory by selection from the lists of names of pathogens or disease symptoms. The window* THERA *is displayed and the icon “*A B C*” has been touched.





The first window of the Rife name table is displayed. The table is stored in alphabetical order.
The icon’s “PREV” and next in the lower right corner allow to page through the list until the item wanted is found.
A touch on the name moves the associated frequencies to the operating memory and the window THERA is displayed.
(The procedure to follow from that point is identical to the one explained on the previous page.)

The window offers two more icon’s. “STOP” cancels the search. A touch on “HIGH” (stands for HIGH frequency application = CLARK) toggles to “LOW” and displays the Clark name table (second image from the top). This is in alphabetical order too.

(The procedure to follow from that point is identical to the one explained above and on the previous page.)

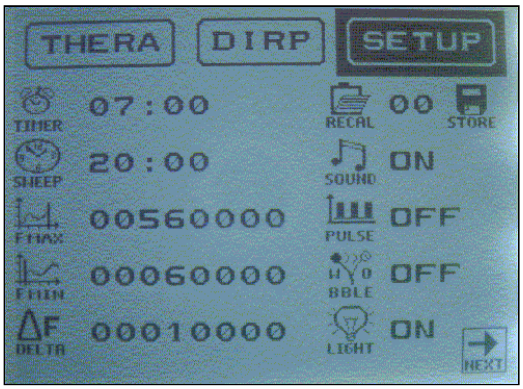
WIDE BAND SWEEP

SWEEP, or wide band sweep, describes a procedure whereby the *F-SCAN*^{2} issues successive frequencies, changing in small increments, which are each active for a default 'Delay' - time of about 20 ms. This time element can be adjusted by the user. SWEEP can be used with all outputs at any amplitude. To avoid problems, please read **Adjustment of amplitude**.

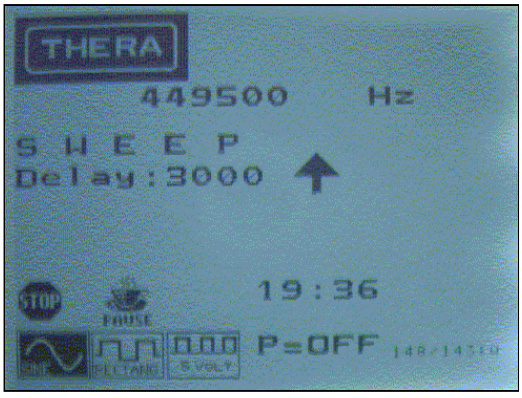
The 'frequency beam' begins at a starting point (lower frequency limit) defined by the user and moves to a turning point (upper frequency limit) defined by the user as well. It turns around and moves back 'downhill' to the starting point only to turn around and go uphill again - and so forth - until the TIMER stops.

This procedure can be used to prepare a user for an intended DIRP analysis if the lower and upper limit's are set to define the same range as planned for the DIRP. The standard application time for SWEEP is 20 to 30 minutes. If the default 'Delay' – time is increased each frequency element will run longer.

The user wants to perform a 'wide band SWEEP'. The tab SETUP *has been touched in order to define the duration, the frequency range to cover and the size of each step* (DELTA F).



- Touch the icon SWEEP, input the time and confirm with 'E'.
- Touch "F MAX" and define the upper limit (turn around point) of the range for the SWEEP
- Touch "F MIN" and define the lower limit.
- Touch "DELTA F" and define it
- Touch the tab THERA, it's window is displayed



- Touch "SWEEP". The application starts right away and the window on the left is displayed.

The SWEEP starts at the lower limit with a sine wave output signal. The wave form can be changed to FULL WAVE square with a touch on it's symbol – and to DC-OFFSET if the switch on the right side panel is set to it's bottom position.

Make sure to **adjust the amplitude to the sensitivity of a user** prior to an application of low frequencies with a square wave form.

A touch on the upward arrow increases the time each frequency increment is active (Delay).

A touch on "STOP" ends the application and on "PAUSE" interrupts it.

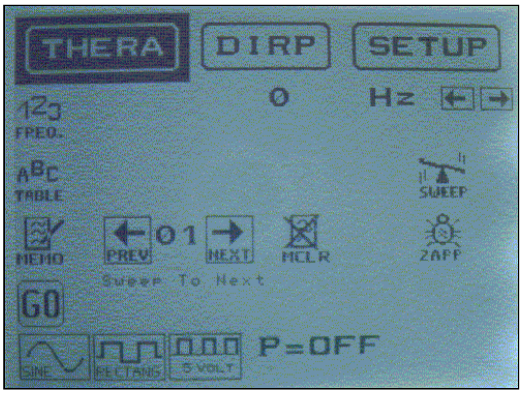
ZAPPER

The ZAPPER – function is programmed to run automatically after a touch on it's icon in the window THERA. It's square wave signal is completely DC-OFFSET and has a fixed amplitude of 5Vpp. The frequency is preset to 40,000Hz.
The only variable to be set by the user is the time for an active cycle. Dr. Clark recommends 7 minutes, but some user's prefer a different time.

The ZAPPER session is defined as 3 active cycles separated by 2 passive cycles. The passive cycle is three times as long as an active cycle. The user can disconnect from the device during the passive cycles and reconnect when the end of the passive cycle is signaled.

Active cycle 1 7 minutes	Passive Cycle 1 21 minutes	Active cycle 2 7 minutes	Passive Cycle 2 21 minutes	Active cycle 3 7 minutes

Touch the tab SETUP, than the icon "TIMER" and define the time for an active cycle. 7 minutes are used in the example displayed below.
Touch the tab THERA to display it's window.



Touch the icon "ZAPP".

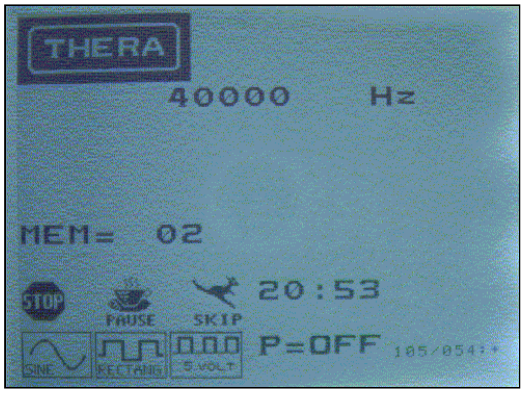
The ZAPPER window shown as 2nd image on the left is displayed.

It shows the frequency, the memory position '01' controlling the 1st active cycle, the timer counting down from 7 minutes and the 5Vpp output signal active.

The 3rd image on the left is displayed as soon as the timer ends the first active cycle.

It shows memory position '02' controlling the 1st inactive cycle. The timer counts down from 21 minutes and the output signal is inactive.

When the timer ends, the window with memory position '03' (not shown as image on the left) controlling the 2nd active cycle opens, and so on, until the ZAPPER session ends.



Since the ZAPPER function is programmed as a sequence of 5 memory positions the user can select each memory position and, if he sees reason to, modify the frequency and/or the wave form.

DIRP

DIRP (**D**ual **I**ntegration **R**esonance **P**rocedure) is an automated procedure to get a resonance feedback from a user if a frequency is fed to him. The procedure can be used within the operating range of the device.

WARNING: User's with PACE MAKER or with PACE MAKER ELECTRODES should consult a cardiologist prior to using DIRP. The general use of frequencies for treatment could perhaps interfere with – or even damage – the PACE MAKER. Pregnant women and people who react very sensitive to electrical current of any magnitude should also consult a medical professional first.

DIRP must be performed with sine wave signals and this wave form is automatically assigned.

Prepare and run a DIRP analysis in the range between 60kHz and 560kHz with a "Delta F" of 1,000 Hz.

- Connect an application cable to the output port and attach the electrodes.
- Connect the finger electrode to the socket SENSOR.

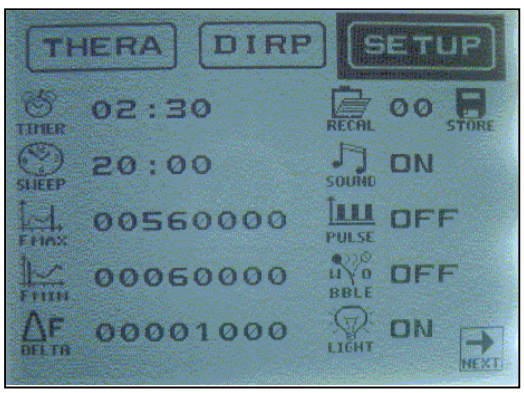
Attach the finger electrode to the top digit of the middle finger of the right hand of the user – as shown below.

Attach finger electrode

Wrap band around to secure in position

- Connect the power supply to an outlet, attach the plug to the socket POWER and set the switch on the rear panel to ON.

The introduction window is displayed. Touch the tab SETUP.



Touch the icon "TIMER", input the time intended for the application of resonant frequencies found during the DIRP and confirm with 'E'.

Touch "F MAX" and input the upper limit of the range for the DIRP (560,000Hz). (No commas.)

Touch "F MIN" and input the lower limit (60,000Hz).

Touch "DELTA F" and input the step size (1,000Hz).

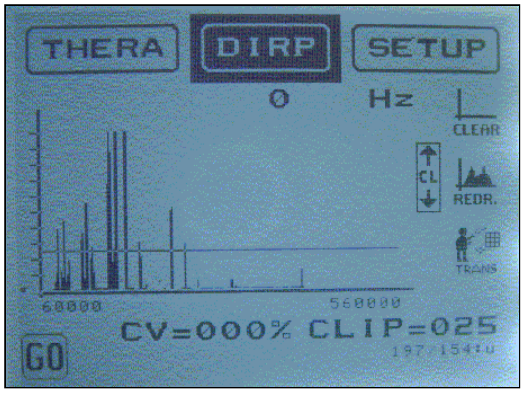
(NOTE: The operating memory can store up to 1,000 analysis steps.)

Continued on next page!

Touch the tab DIRP to display the window.

Place the handheld electrode on the red lead into the left hand of the user. Instruct them to hold their right hand still.

Touch “GO” to start the DIRP analysis.



The frequency currently sent to the user via the handheld electrode is displayed in the frequency field.

All answers from the user (**MV**) are briefly shown in the bottom line (not visible in the picture on the left) and entered into the graph.

The conductivity value (**CV**) is shown under the graph (meaningful only for frequencies above 100Hz) as well as the distance of the horizontal line from the x-axis (the **C**lipping **L**evel).

The DIRP analysis stops at the upper frequency limit of 560,000Hz.

Remove the finger electrode and rest the handheld electrode until ready to start an application. It is important to select the correct wave form for the therapy. Touch THERA now, select the wave form and go back to DIRP.

The horizontal line can now be raised or lowered with the arrow buttons to a **C**lipping **L**evel. All resonant values touching or exceeding the horizontal line can be transferred to the operating memory with a touch on the icon “TRANS”.

24 resonant values were transferred from the sample run above. The 24th is shown here.

The user can page through the memory positions with the buttons “PREV” and “NEXT” and, if required, eliminate entries with a touch on “MCLR” in any memory position with a value.

The “**S**weep **T**o **N**ext”-feature can be activated for any two adjacent frequencies in the list.

If window 1 of the tab SETUP is displayed, the “50 TIMER” feature, “PULSE” or “WOBBLE” can be activated as well.

If window 2 of the tab SETUP is displayed, and a serial printer attached to the RS232 communications connector of the device, the DIRP data set can be printed and/or the DIRP graph and/or the content of the operating memory and/or the SETUP window 1.

NOTE: If the number of selected frequencies exceeds 50, the message MEMO FULL appears in the bottom line indicating that no more values can be accepted.

Continued on next page!

If ready to start the application of the frequency set prepared, connect the user with suitable electrodes, go to the window THERA and touch “GO”. As described before, the icon’s “STOP”, “PAUSE” and “SKIP” can be used to end the application, to take a break or to skip to the next frequency before the assigned time element is up.

Some prerequisites for a successful DIRP analysis are:

- the user should be calm and relaxed. About two hours should have passed since his last meal and his last cup of coffee, fermented tea or light alcoholic beverage.
- therapist and user should not engage in a conversation during the analysis.
- electronic equipment which may emit high frequencies – or make unnecessary distracting noises – should be shut down. This includes fluorescent light sources nearby. Watches should be removed.
- the sequence of activities described in this chapter is followed.
- the finger electrode must not be attached too tight (may cause discomfort over time) and not too loose (may cause errors) – a factor of experience.
- the user’s hands must not touch or ‘short out’ by being placed on an uncovered part of the body.
- the low **CV** of a user may improve a few minutes after drinking a glass of water or after a ‘wide band sweep’ for about 30 minutes in the same band the DIRP analysis is supposed to cover. A **CV** above 25% may be caused by high blood pressure, a rapid pulse, nervousness or by moist hands. The user must be calmed with adequate procedures.
- DIRP should not be used for user’s who are hyper sensitive to electrical stimulation.
- DIRP should not be used during pregnancy.
- DIRP should not be used for user’s with severe heart problems.
- DIRP should not be used for infants.

Special features explained

“WOBBLE”

If the special feature WOBBLE is enabled, each frequency will swing around the targeted value within a range selectable between ± 10Hz and ± 9,000Hz (in 27 steps –10 to 90, 100 to 900 and 1,000 to 9,000).

Example:

Input a value of 100,000Hz, store in the operating memory and START. If the WOBBLE feature is disabled the output remains at 100,000Hz for the time period controlled by the TIMER. If a WOBBLE-range of ± 1,000Hz has been selected in ‘SETUP window 1’, the output will swing between 101,000Hz and 99,000Hz. The frequency steps taken follow a preset internal algorythm. Whenever an upper or lower limit is reached the direction will change from increasing frequency values to decreasing values and vice versa until the TIMER stops, switches to the next frequency range or until the user interrupts the routine.

“PULSING” the output signal

The output signal can be pulsed, if this special feature is enabled in the ‘SETUP window 1’. The software provides pulse rates of 5, 10, 15 or 20 per second. PULSE means a slow modulation of the target frequency. Example: If a pulse rate of 5 is selected for a frequency of 1,000Hz in a position of the operating memory, 1,000Hz will be delivered on the output for 0.1 second, switched off for 0.1 second, on again for 0.1 second, and so on. The 1,000Hz will thus be active 5 times each second.

Use of a serial printer

The unit can be connected to a serial printer with the special data cable. If the ‘SETUP window 2’ is displayed, four different print commands can be touched:

Print the content of the operating memory
Print the complete data set of a DIRP
Print the DIRP graph
Print the ‘SETUP window 1’ with it’s settings

The serial printer must be compatible to an EPSON FX, like the SEIKO EPSON DPU-414. TB-ELECTRONICS can check availability and provide printer settings on request.

Use of the software *F-SCAN* (developed by TB-ELECTRONICS, Ltd.)

The unit can be connected to a PC or Notebook with the special data cable and remotely controlled from the computer if the software *F-SCAN* is loaded and active. This feature allows the user to view the DIRP data in more detail, provides search functions for the CLARK and RIFE tables, allows the user to compare resonant values found to the CLARK table, to comfortably establish a data bank with user’s data, and so on.

A CD with the software is supplied with the device. It also contains a PDF-file with a detailed manual.

Use of the “PowerPort”

The “PowerPort” provides amplified signals to drive special accessories, like a flat magnetic coil adapter, or a special lamp adapter with an array of UV-LEDs.

See options for details.

“DATA EXCHANGE” between *F-SCAN²* and SATELLITES

If the ‘SETUP window 2’ is displayed, two different command lines can be touched to send the content of the operating memory via a special data cable to an F-SCAN satellite.

The command line “Transfer to SAT 1” transfers the data set to an F-SCAN.

The command line “Transfer to SAT 2” transfers the data set to an *F-SCAN²* satellite.

OPTIONS

The special software F-SCAN developed by TB-ELECTRONICS

The unit can be connected to a PC or Notebook – or to a serial printer - with the special data cable and remotely controlled from the computer if the software F-SCAN is loaded and active. This feature allows – among all other tasks – to establish a data bank with patients data.
Contact your dealer or the factory for detailed information.

BATTERY PACK

A small but powerful battery pack supports uninterrupted applications of frequencies independent from an outlet for up to 3.5 hours with a fully charged battery. The 7.2 Volt lithium – ion battery can be recharged at least 1000 times if treated and stored correctly. The battery pack assembly contains all components required to charge, use and control the battery. A specially designed mechanism allows the user to replace the battery at the end of it’s life without tools. The housing is equipped with anti-slide supports. The assembly plugs into the power connector and fit’s between the legs of the Frequency Synthesizer if they are extended.

FLAT MAGNETIC COIL ASSEMBLY

The special round and flat magnetic coil generates a weak magnetic field which can be used to carry frequency signals into deeper regions of the body. The coil is attached to the device with 2mm “pin” cables. It’s operating bandwidth is 1MHz. For further information see the manual shipped with the coil.

ADAPTER FOR FREQUENCY-MODULATED UV-LIGHT

This tube-shaped adapter has an array of LED’s emitting ultraviolet light. UV-light penetrates the skin deeper than the full spectrum light. It can be used parallel to pad electrodes or for stand alone applications. The adapter connects to the PowerPort. (Eyes must be protected from UV-Light during application!) For further information see the manual shipped with the adapter.

STYLUS FOR EAV-APPLICATIONS

The F-SCAN^2 has a built-in EAV-measurement capability. The EAV-stylus connects to the SENSOR port with a special cable. The stylus allows the user to measure the potential of Electro Acupuncture Points. For further information see the manual shipped with the stylus.

The shipment from the factory includes:

F-SCAN^2
Universal power supply
Gold plated handheld electrodes (set of 2)
Application cable
Finger electrode
Data cable for RS232 Interface
Instruction Manual

See the attached list for other accessories and attachments, various cables, self adhesive electrodes, etc. They are available from your dealer or from the factory.

Technical data

Case	Aluminum
Dimensions	300mm x 180mm x 110mm
Touch screen, monochrome	82mm x 62mm; 320 x 240 pixel
Min. frequency selectable	0.1Hz
Frequency stability	20 ppm
Memory	Operating portion stores up to 50 frequencies with individual parameters sequentially in several functions during operation. Permanent portion stores about 6000 values in tables, TIME functions, limit's for SWEEP/DIRP. Operating software in flash memory.
Power supply	Universal AC-adapter. Input:100–240 VAC, 50–60 Hz, Output: 15 V DC, 800mA
Option battery pack	Rechargeable battery. Rated voltage 7.2VDC. Operating temperature 10°C - 40°C (50°F - 104°F). Capacity: 1.700 mAh
Multi signal OUTPUT	Sine wave, positive DC-OFFSET, amplitude preset to 10 Vpp Square FULL WAVE, amplitude adjustable 0 to 27 Vpp. Square wave, positive DC-OFFSET, amplitude adjustable 0 to 13.5 Vpp Square wave, positive DC-OFFSET, amplitude preset to 5 Vpp
PowerPort.	Square wave, positive DC-OFFSET, 14Vpp / 200mA

The table on the following page shows the operating range of the different wave forms generated by the device. It further shows the maximum amplitude of the signals in relation to the frequency.

Due to manufacturing tolerances of the components used the bandwidth of the outputs may be slightly higher.

Continued on next page!

Output range:

Frequency [Hz]	Amplitude Sine [V]	Amplitude Square [V]	Amplitude Square '5V'
1,000	12.2	27.0	5.2
1,000,000	11.6	27.0	5.2
2,000,000	11.2	27.0	5.0
3,000,000	11.2	27.0	5.0
4,000,000	11.0	22.8	5.0
5,000,000	10.4	18.8	5.0
6,000,000	10.4	18.0	4.8
7,000,000	9.4	---	---
8,000,000	8.8	---	---
9,000,000	8.2	---	---
10,000,000	8.0	---	---
11,000,000	7.6	---	---
12,000,000	7.0	---	---
13,000,000	6.4	---	---
14,000,000	6.2	---	---
15,000,000	5.6	---	---

Connectors provided: Multi signal OUTPUT and PowerPort

POWER (connect power supply)

SENSOR

RS232 for serial communication with printer, PC or Notebook

Classicication: Medical device Class 1, Type B EN60601
Regulation 93/42EEC

Changes to improve or simplify the product will be made without prior notice

Periodical Maintenance

F-SCAN2 is a medical device. Inspection and tests must be performed by a professional with adequate test equipment. Dated and signed record (see form on next page) of the periodical maintenance must be kept with the unit.

1.1 Visual inspection

1.1.1 Check power supply and cable (connectors and insulation)
1.1.2 Check touch screen (dirt and scratches)
1.1.3 Check connectors, switch and application parts (unbroken and clean)

1.2 Functional tests

Use oscilloscope with digital readout to verify all outputs:

1.2.1 Connect power supply to an outlet, check software version
1.2.2 Verify all input fields on the touch screen
1.2.3 Connect application cable and electrodes
1.2.4 Select tab THERA and “1 2 3”
1.2.5 Enter frequency of 1,000Hz and touch “GO”
1.2.6 Connect oscilloscope to OUTPUT and measure frequency and peak-to-peak voltage swing: The displayed frequency must be 1,000Hz ± 0.1Hz, the voltage must be 11Vpp ± 1.5V. The wave form must be SINE, positive DC-OFFSET.
1.2.7 Touch “RECTANG”. The frequency must not change. The amplitude must be adjustable with the potentiometer between 0V and 27Vpp. The wave form must be square FULL WAVE.
1.2.8 Set the switch to it’s bottom position. The frequency must not change. The amplitude must be adjustable with the potentiometer between 0V and 13.5Vpp. The wave form must be square DC-OFFSET.
1.2.9 Touch “5 VOLT”. The frequency must not change. The amplitude must be 5.0 Vpp ± 0.4 V. The wave form must be square DC-OFFSET.
1.2.10 Connect oscilloscope to PowerPort. The values of frequency and amplitude must not differ. Amplitude must be 14Vpp ± 1.5V when device is used with power supply; 6V ± 1V when the battery pack is used.
1.2.11 Connect DIRP simulator to OUTPUT and SENSOR. Select DIRP and run it in the range between 60,000Hz and a higher value. The CV value on the screen must match the one marked on the simulator ± 1.

Record of periodical inspection and test of F-SCAN^2

Serial number: _____ Delivery Date: _____

Customer: _____

List of accessories: _____

_____

_____

_____ _____

Date: Name of Professional:

Visual inspection

POWER SUPPLY	O OK	O NOT OK
TOUCH SCREEN	O OK	O NOT OK
CONNECTORS & SWITCH	O OK	O NOT OK
ATTACHMENTS & CABLES	O OK	O NOT OK

Functional Tests

Verified with oscilloscope (with digital readout) - where applicable

Software version: _____

O Touch fields O OK O NOT OK

O Application parts connected, THERA selected, 1,000Hz entered and “GO” touched

O Oscilloscope connected 1st to OUTPUT, 2nd to PowerPort, SINE wave signal

Vpp _____ f _____ O OK O NOT OK

O Oscilloscope connected 1st to OUTPUT, 2nd to PowerPort, RECTANG FULL WAVE signal

Vpp _____ f _____ O OK O NOT OK

O Amplitude set with potentiometer to 27V.

Vpp _____ O OK O NOT OK

O Oscilloscope connected 1st to OUTPUT, 2nd to PowerPort, RECTANG DC-OFFSET signal

Vpp _____ f _____ O OK O NOT OK

O Amplitude set with potentiometer to 13.5V.

Vpp _____ O OK O NOT OK

O Oscilloscope connected to OUTPUT, SQUARE DC-OFFSET-5Vpp signal

Vpp _____ f _____ O OK O NOT OK

O DIRP simulator connected

CV= _____ O OK O NOT OK

The unit is : O OK O NOT OK Signature:_____

1	Adenovirus 1	393000
2	Adenovirus 2	371450
3	Aflatoxin	177000
4	Alpha streptococ	380375
5	Anaplasma marg 1	387000
6	Anaplasma marg 2	415300
7	Ancylost. brazil	401000
8	Ancylost. caninu	400000
9	Argyria	81000
10	Ascaris	408000
11	Bac. anthracis 1	395000
12	Bac. anthracis 2	363200
13	Bac. anthracis 3	359400
14	Bac. cereus	374500
15	Bac.anthrac. Spo	388000
16	Bac.subt.var.nig	385000
17	Bacillus	376000
18	Bacter. frag. 1	325000
19	Bacter. frag. 2	325700
20	Bacteria Capus.	360000
21	Balantidium coli	460000
22	Besnoitia	358000
23	Beta streptococ.	385000
24	Bird mite 1	877000
25	Bird Mite 2	878000
26	Blepharisma	406500
27	Blue Green Algae	256000
28	Bordetella pert.	331000
29	Borellia burgdor	380000
30	Branhamella	396000
31	Bryozoa cristata	396000
32	Campy. pyloridis	355000
33	Campylobacter	368000
34	Candida albicans	386000
35	Capillaria hepat	428000
36	Caries	384300
37	Caries (N) 1	367900
38	Caries (N) 2	326950
39	Caries (N) 3	293200
40	Chilomastix 1	389000
41	Chilomastix 2	425200
42	Chilomonas	398000
43	Chlamydia tracho	381000
44	Clonorchis sines	427000
45	Clostridium acet	389000
46	Clostridium botu	362000
47	Clostridium perf	396000
48	Clostridium sept	364000
49	Cold Virus	395800
50	Coryneb. diphth.	342000
51	Coryneb. xerosis	316000
52	Coxsackie Vir B1	364000
53	Coxsackie Vir B4	362500
54	Coxsackie Vir B4	363900
55	Cryptocotyle lin	414000
56	Cystericus fasci	436400
57	Cytochalasin B	91000
58	Cytomegalovirus	409000
59	Cytophaga rubra	430000
60	Demodex Follicu.	682000
61	Dental Plaq I 1	378800
62	Dental Plaq I 2	233100
63	Dental Plaq II 1	384950
64	Dental Plaq II 2	278750
65	Dental Plaq II 3	212150
66	Dental Plaq II 4	340150
67	Dental Plaq II 5	305500
68	Dientamoeba frag	404000
69	Diphyll latum	452900
70	Diphyll erinacei	467250
71	Diplococ diphter	361000
72	Diplococ pneumon	365000
73	Dipylidium canin	439550
74	Dipylidium canin	451950
75	Dirofilaria immi	409000
76	Dust mitee	707000
77	Echinococ granul	451600
78	Echinococ multi	455850
79	Echinococ Zysten	441150
80	Echinoporphium	421000
81	Echinostoma revo	428000
82	Eikanella corrod	382000
83	Endamoeba gingiv	438000
84	Endolimax nana 1	396000
85	Endolimax nana 2	430500
86	Entamoeba-coli	398000
87	Entamoeba-hystol	385000
88	Enterobac aerog.	374000
89	Enterobius vermi	423000
90	Epstein-Barr-Vir	380000
91	Ergot	295000
92	Erwinia amylovor	350000
93	Erwinia carotovo	373000
94	Escherichia coli	356000
95	Escherichia coli	392000
96	Eurytrema pancre	421000
97	Fasciola-hepatic	425000
98	Fasciola-hep-Ei	425000
99	Fasciola-hep-Mir	423000
100	Fasciola-hep-Red	425000
101	Fasciola-hep-Zer	427000
102	Fasciolops Busci	434000
103	Fasciolops Redie	432000
104	Fischoedrius elo	442000
105	Fungus EW	362000
106	Fungus JWB	397200
107	Gaffkya tetragen	350000
108	Gardnerella vagi	340000
109	Gastrothylax elo	455000
110	Giardia-lamblia	424000
111	Griseofulvin	288000
112	Gyrodactylus	380000
113	Haemonchus conto	393000
114	Haemophilus infl	336000
115	Hasstile sig.tri	453000
116	Hepatitis-B-Anti	418000
117	Herpes simpl. 2	350000
118	Herpes simpl.1 1	292000

119	Herpes simpl.1 2	345350
120	Herpes Zoster	418000
121	Histomonas melea	377000
122	Histoplasma caps	302000
123	HIV	365000
124	Hymenolepis cyst	478000
125	Hymenolepis dimi	445000
126	Hypodereum conoi	427000
127	Influenza A	313350
128	Influenza B	323900
129	Iodamoeba but 1	445000
130	Iodamoeba but 2	398150
131	Kapselbakterien	417500
132	Klebsiella pne 1	401000
133	Klebsiella pne 2	416900
134	Lactobac. acidop	349000
135	Leishmania bras	403000
136	Leishmania dono	400000
137	Leishmania mexi	402000
138	Leishmania trop	405000
139	Leptospira inter	399000
140	Leucozytocoon	400000
141	Loa loa	361000
142	Lycogala	126000
143	Macracanthorhync	440000
144	Masern-Antigen	371000
145	Metagonymus Yoko	440000
146	Moniezia expansa	430350
147	Moniezia(Scolex)	430350
148	Mucor mucedo	288000
149	Multiceps serial	453600
150	Mumps-Antigen	382000
151	Mycobact. phlei	410000
152	Mycobact. tuber	432000
153	Mycoplasma 1	323500
154	Mycoplasma 2	342750
155	Myxosoma	414000
156	Naegleria fowler	362000
157	Neisseria gonorr	334000
158	Nocardia aster 1	355100
159	Nocardia aster 2	363700
160	Onchocerca volvu	440000
161	Paragonimus West	452000
162	Passalurus ambig	441000
163	Plasmodium cynom	422000
164	Plasmodium falci	373000
165	Plasmodium vivax	442000
166	Pneumocystis car	407000
167	Propionobacter.	387000
168	Prostogonymus	401000
169	Proteus mirab. 1	324000
170	Proteus mirab. 2	345950
171	Proteus vulgar 1	413000
172	Proteus vulgar 2	333750
173	Proteus vulgar 3	327200
174	Pseudom. aerugin	333000
175	Rhizobium melilo	330000
176	Rotifer	1151000
177	RS-Virus	380000
178	Salmonella enter	329000
179	Salmonella typhi	355000
180	Sarcocystis	452000
181	Scabies	735000
182	Schistosoma haem	473000
183	Schistosoma mans	353000
184	Serratia marcesc	351000
185	Shigella dysente	390089
186	Shigella flexner	394000
187	Shigella sonnei	318000
188	Sorghum-Sirup	277000
189	Sphaerotilus nat	391000
190	Spirillium serp	380000
191	Staphyloc aur 1	376270
192	Staphyloc aur 2	381000
193	Stemonitis	211000
194	Stephanurus dent	461000
195	Sterigmatocystin	88000
196	Stigeoclonium	412000
197	Streptoc lactis	385000
198	Streptoc mitis	318000
199	Streptoc pneumon	368000
200	Streptoc pyogene	373000
201	Streptoc sp. gr	368000
202	Strongyloides	400000
203	Sub terminal spo	385150
204	Taenia pisi cyst	475200
205	Taenia pisi eggs	465200
206	Taenia saginata	476500
207	Taenia soli cyst	475000
208	Taenia soli Scol	444000
209	Teponema pallidm	347000
210	Tobacco Mosaic V	428000
211	Toxoplasma	395000
212	Trichinella spir	404500
213	Trichomonas vagi	381000
214	Trichoris sp.	406000
215	Troglodytella 1	383000
216	Troglodytella 2	416900
217	Trypanosoma bruc	429000
218	Trypanosoma cruz	463000
219	Trypanosoma equi	448000
220	Trypanosoma gamb	396000
221	Trypanosoma lewi	425000
222	Trypanosoma rhod	426000
223	Tyroglyphus Far.	718000
224	Urocleidus	447000
225	Veillonella disp	403000
226	Wart BS	404000
227	Wart CC	430000
228	Wart FR	462000
229	Wart HA	442000
230	Wart HPV	407000
231	Wart HRCm	446000
232	Wart JB	420000
233	Wart Plantar	405000
234	Wart Zervix-Aus	404300
235	Zearalenon	100000

R1	abdominal inflammation	10000	2720	2170	1865	1550	880	832	802	787	776	727	465	450	440	125	20	
R2	abdominal pain	10000	5000	3040	500	100	95	3										
R3	abortion	10000	5000															
R4	abscess	2720	2170	880	787	727	500	465										
R5	acne	5000	2720	2170	1800	1600	1500	880	787	727	500	465						
R6	actinomyces	10000	787	727	465	465	20											
R7	acupuncture point block	465	18															
R8	acute fatigue	5000																
R9	acute pain	10000																
R10	addiction	5000																
R11	adenoma	10000	880	787	727	20												
R12	adiposis	10000	465	100														
R13	adrenal gland enhancement	20	10															
R14	adrenalin increase	465	20	10														
R15	allergy	10000	5000	880	787	727	500	465	330									
R16	amenorrhea	10000	1550	880	802	787	760	727	465	100	20							
R17	andtibacteria	1550	880	802	787	760	727	660	465	450	444	428						
R18	anemia	5000																
R19	angina pectoris	5000	2720	2170	1600	1500	880	832	787	776	727	660	465	444	125	20	14	3
R20	appendicitis	1550	880	802	787	727	650	465	450	440	380	190	125	95	72	20	10	
R21	appendix enhancement	880	440	10														
R22	arneurysm	1865	880	787	760	727	465	444	125	95	72							
R23	arteriosclerosis	10000	5000	2720	2170	1800	1600	1500	880	787	776	727	500	465	100	20		
R24	arthritis	10000	100															
R25	arthrosis	465	10															
R26	arythmia	82	78	72	70	41	36											
R27	asthma	2720	2170	1800	1600	1500	880	787	727	465								
R28	asthmatic bronchitis	522	444	146	125	95	72	20	1									
R29	ataxia	5000	9	8														
R30	autointoxication	10000	880	787	727	522	146	100	20									
R31	back pain	10000	1550	880	802	787	760	727	465	100								
R32	Bechet Disease	3040	1550	880	802	787	727	725	660	650	625	600	465	428	120	82	60	10
R33	bed wetting	1550	880	802	787	727	465											
R34	blood cleansing	5000	2															
R35	bone fracture	2720	25															
R36	bone injury	10000	1550	880	802	787	100											
R37	brain stimulation	2000	1000	465	20													
R38	brain wave alpha wave	12	11	10	9	8												
R39	brain wave Beta wave	30	27	22	19	14	12											
R40	brain wave, Delta wave	4	4	2	1													
R41	brain wave, Theta wave	7	6	4														

R42	breast cancer	10000	5000	2127	2008	880	800	787	727	20								
R43	bronchitis	880	727	9														
R44	burn	10000	880	787	727	465	200	190										
R45	burning	1000	880	787	727													
R46	bursitis	880	787	727														
R47	cancer	10000	2130	2128	2127	2120	2008	880	787	727	690	465						
R48	candida	465	450															
R49	carcinogen	10000	2130	2128	2127	2120	2008	880	787	727	690	465						
R50	Carcinoma, Group 1	10000	6000	5000	3176	2720	2489	2093	2101	2109	2117	2125	2133	2141	2149	2157	2165	2173
		2181	2189	2197	2205	880	800	728	664	464	304	120	20					
R51	Carcinoma, Group 2	10000	6000	5000	3176	2720	2489	2096	2104	2112	2120	2128	2136	2144	2152	2160	2168	2176
		2184	2192	2200	2208	880	800	728	664	464	304	120	20					
R52	Carcinoma, Group 3	10000	6000	5000	3176	2720	2489	2099	2107	2115	2123	2131	2139	2147	2155	2163	2171	2179
		2187	2195	2203	2211	880	800	728	664	464	304	120	20					
R53	cardiac inflammation	2720	2170	1600	1550	880	802	787	727	625	125	95	72	20				
R54	caries (decay tooth)	10000	20															
R55	cataract	10000	5000	880	787	727	500	465	100									
R56	cataract (non diabetes)	5000																
R57	cerebral dysfunction	10000	880	787	727	522	465	100										
R58	cerebral palsy	10000																
R59	cervice brachial syndrome	10000	1															
R60	cervicitis	880	787	727	20													
R61	chicken pox	1800	1600	1550	1500	880	802	787	728	727	20							
R62	chilblain	5000	880	787	727	465	20											
R63	children's disease	880	787	727														
R64	cholecyst	880	787	727	30	20												
R65	cholera	880	802	787	727	450												
R66	chololith	3040	880	787	727	20												
R67	chronic fatigue	10000																
R68	circulatory dysfunction	10000	20															
R69	Claudicatio intermittens	48	45															
R70	cold	5000	1550	880	802	787	776	727	465	444	20							
R71	cold feet	5000	20															
R72	cold hands	5000	20															
R73	cold upper body	5000	880	800	787	727												
R74	colic	1550	832	802	800	787	776	727	465	444	20							
R75	colitis	10000	1550	880	832	802	800	440	100	20								
R76	Compensation from anesthesia	2008	522															
R77	conjunctivitis	2128	1550	880	802	787	728	727	465	80	20							
R78	constitutional diabetes	700	35															
R79	constriction	5000																

R80	corn, clavus	10000	20													
R81	coryza	10000	880	802	787	776	727	465	444	440	100	20				
R82	cough	10000	728													
R83	coxitis	5000	880	727	20											
R84	cyctitis	1550	880	802	800	787	727	465	20							
R85	dandruff	5000	500	465												
R86	deaf	5000	20													
R87	depression	10000	787	73	35	8	4	1								
R88	detox acceleration	522	146	1												
R89	detox from anesthesia	522	146													
R90	diabetes	10000	5000	2720	2170	1800	1550	880	802	787	727	500	465	100	35	20
R91	diarrhea	5000	1550	880	787	727	465	165								
R92	digestive trouble	10000	5000	880	787	727	465	444	125	100	95	72	49	20		
R93	diphteria	5000	880	787	776	727	20									
R94	Down Syndrome	10000	5000	20												
R95	drug addiction	111	20													
R96	duodenal ulcer	10000	880	727												
R97	dysmenorrhea	10000	1550	880	802	787	760	727	465	100	20					
R98	dyspepsia	1550	880	802	787	727										
R99	ear in general	880	787	727	465	9										
R100	ear pain	5000														
R101	ear,eustachitis	1550	880	802	800	787	776	727	465	20						
R102	eczema, atopy	5000	1800	880	787	727	522	146	49							
R103	edema	10000	5000	880	787	727										
R104	embolus	5000	800	20												
R105	enlarged epididymis	1500	20													
R106	enlarged liver	880	787	728												
R107	enuresis	10000	5000	1550	880	802	787	727	465							
R108	epicondylitis	5000	20													
R109	epilepsy	10000	880	802	787	727	700	650	600	125	120	20				
R110	Epstein-Barr	880	787	727	660	465	428									
R111	equilibrium dysfunction	10000	20													
R112	erysipelas	10000	2000	880	787	727	725	660	600	465	20					
R113	Escherichia Coli	804	802	799												
R114	esophagus disease	880	787	727												
R115	eye blurred view	5000	880	787	727	20										
R116	eye inflammation	5000	1550	880	802	787	728	727	120	2	1					
R117	eye, arteriosclerosis	10000	880	787	727	20										
R118	facial paralysis	10000	5000	880	787	727	100									
R119	fainting	5000	20													
R120	feet fungus	1550	880	802	727	465	20									

R121	fever	10000	5000	880	787	727	440	20										
R122	fibroma	2127	2008	1550	802	727	690	666	465									
R123	fibrositis	2720	2170	1550	880	802	787	727	660	465	444	428	20					
R124	finger contracture	250	1															
R125	Fistula ulcer	880	832	787	727													
R126	food poison	10000																
R127	furuncle	5000	1550	880	802	800	787	727	660	500	465	20						
R128	gangrene	880	787	727	73	20												
R129	gastric enhancement	2720	2170	2127	1865	1800	1600	1550	1500	880	802	787	727	444	125	95	72	20
R130	gastric trouble, indigestion	2127	2008	880	787	727	659	450	400	125	95	72	20	4				
R131	gastric ulcer	880	787	727														
R132	gastritis	5000	20															
R133	gastritis with gas	880	832	787	727	20												
R134	German measles	880	787	120														
R135	glaucoma	1600	880	787	727													
R136	glaucoma	1600	880	787	727													
R137	gonorrhea	5000	880	787	727	660	600											
R138	gout	10000	3040	880	787	727	20	9										
R139	hair loss	10000	880	787	727	465	146	100										
R140	hangover	10000	522	146	100													
R141	head injury	10000	9	6														
R142	headache caused by urogenital system	10000	3040	9														
R143	headache from displaced vertebra	10000	3040	10														
R144	headache from parasites	10000	3040	727	125	95	73	20										
R145	headache from toxin	10000	3040	880	787	727	522	146	49	20								
R146	headache general	10000	3040	650	625	600	10	6	5									
R147	heart	10000	880	787	727	465	162	160	125	100	95	81	80	73	20	4		
R148	hematoma	10000	110	9														
R149	hemorrhage	1550	802	465														
R150	hemorrhoid	1550	880	802	800	727	465	20										
R151	hepatitis(jaundice)	5000	1550	880	802	787	728	727	120	2	1							
R152	herpes zoster	2720	2170	1865	1800	1600	1550	1500	880	802	787	727	20					
R153	hickup	10000	20															
R154	hoarse voice	880	787	760	727													
R155	hordeolum	10000	880	787	727	20												
R156	hyperacid	10000	880	802	787	776	727	465	100	20								
R157	hyperprostate, benign	2720	2489	2127	2008	1550	802	787	776	727	465	444	410	125	100	95	72	20
R158	hyperprostate, malignant	2127	2008	727	690	666												
R159	hypertension	10000	880	787	727	465	20	9										
R160	hypertrophied adenoid	2128	880	787	727	20												
R161	hypoacid	770	20															

R162	hypomnesis	10000	20															
R163	hypotension	727	465	20														
R164	hypoxia	10000																
R165	hysteria	5000	20															
R166	Immune stimulation	34750	31750	31000	5000	2489	1600	1550	1500	880	802	787	727	660	650	465	440	428
R167	impotent	10000	2127	2008	802	787	727	650	625	600	465	125	95	20	9			
R168	infection	1550	1500	1000	880	832	802	787	776	760	727	700	690	685	666	650	625	600
R169	inflammation in general	5000	2	1														
R170	influenza	1550	1500	880	802	800	787	727	20									
R171	inguinal hernia, intestinal hernia	10000	5000	787	727	100												
R172	insect bite	880	727															
R173	insensate	10000	1550	880	802	800	787	727	465	100	20							
R174	insomnia	10000	1550	1500	880	802	100	10	4	3								
R175	intercostal neuralgia	3040	1865	1550	880	802	787	776	727	444	125	20						
R176	intestinal ulcer	880	440	20	10													
R177	ischia	1550	880	802	787	727	690	100	10									
R178	itching (anus)	10000	5000	1865	880	787	760	727	500	465	444	125	100	95	72	20		
R179	itchy	1865	880	787	760	727	125	95	72	20								
R180	joint pain	5000	1550	880	802	787	727	250	28	20	10	9	8	3	1			
R181	kidney stone	10000	5000	4														
R182	knee joint pain	1550	880	802	787	727	20	10	9	3	1							
R183	laryngitis	1550	880	802	787	770	727	465	444	440	250	120	30	28	10	9	1	
R184	leper	10000	1550	1500	880	802	787	727	690	685	660	650	625	600	465	444	428	20
R185	leukemia	2127	2008	880	787	727	690	666										
R186	leukocyte increase	5000																
R187	leukodermia	5000	880	787	727	500	444	20										
R188	leukoplakia	2127	2008	727	690	666	465											
R189	liver/gallbladder disease	10000	5000	1550	880	832	802	787	727	465	100	20						
R190	loss of appetite	10000	1865	880	787	727	465	444	125	95	72	20						
R191	loss of olfactory sense	10000	20															
R192	lumbago	10000	1865	880	787	727	444	125	100	95	72	9	8	7				
R193	lung enhancement	5000	1550	880	802	787	776	727	500	450	125	95	72	20	9			
R194	lung fibrosis	410	220	28														
R195	lymph block	880	787	727	522	444	440	148	146	6								
R196	lymph gland	880	440	100	10													
R197	Malaria	880	800	787	728	20												
R198	mammary tumor	5000	1550	880	802	787	776	727	690									
R199	measles	880	787	727	20	1												
R200	Menier Disease	5000	1550	880	802	787	727	500	465	428								
R201	meningitis	1865	1550	880	832	802	787	727	660	650	625	600	465	444	428	125	72	20
R202	menopause feverish	10000	880	787	727	100												

R203	menopause in general	10000	880	832	802	787	727	660	650	600	465	444	125	95	72	20		
R204	mental retardation	10000																
R205	meteorism	5000	1550	880	802	787	727	465										
R206	migraine headache	5000	20	10														
R207	mold infection	1550	880	802	727	465	20											
R208	motor disfunction	1865	880	787	776	727	650	625	600	125	95	72	20					
R209	mouth herpes	2489	1850	1800	1550	1500	880	787	727	465	428							
R210	mucous membrane inflammation	1550	880	802	787	727	444	20										
R211	multiple sclerosis	5000	1550	880	802	787	727	20										
R212	mumps	10000	2720	2489	2127	2127	2008	880	787	727	428	100	72	20				
R213	muscle atrophy (dystrophy)	5000	880	787	727	522	146	1										
R214	muscle pain from injury	320	250	240	160	80	40	20	10	6	3	2	1					
R215	muscle rigidity	5000	1800	1550	802	776	320	250	240	125	20	10	6	3	2	1		
R216	muscle spasm	787	760															
R217	myelitis	5000	500	20														
R218	nausea	880	832	787	727	20	5											
R219	neck cramp	49	9	6	5													
R220	neck rigidity	5000	500															
R221	nephritis	1500	880	787	727													
R222	nephrosis	880	787	727	465	100	73	40	10									
R223	nervous disease	2720	2489	2170	1800	1600	1550	880	802	787	727	660	650	625	600	440	125	20
R224	nettle rash	10000	5000	1800	880	802	787	727	1									
R225	neuralgia	10000	787	727														
R226	neurasthenia	5000																
R227	neurosis	10000	28															
R228	neurosity	10000	30	20	3													
R229	nightmare	10000	20															
R230	nose mucous hypersensitivity	10000	2127	2008	727	690	666	120	100	20								
R231	obstruction	1550	880	802	800	787	776	727	465	20								
R232	orchitis	2720	2489	2170	2127	2008	1800	1600	1500	880	832	802	787	776	727	650	625	125
R233	ostitis	1560	880	800	28	10	8	1										
R234	otitis	1550	880	802	787	776	727	465										
R235	otosclerosis	9																
R236	ovaritis	2489	2127	1600	1500	880	832	802	800	787	776	727	650	625	465	440	20	1
R237	overhydration	880	787	727														
R238	pain from cancer	3040	1550	880	802	787	776	727	95	49	5							
R239	pain from convulsion	10000	880	787	727	100	26											
R240	pain from infection	3040	95															
R241	pain of intercostal muscle	3040	2127	2008	727	690	666	95										
R242	pain psychogenic	330	100															
R243	pancreas weakening	2720	1550	880	832	802	787	776	727	690	650	625	600	465	26	20	15	10

R244	paralysis	10000	20	8	7													
R245	paralysis, convulsion	10000	1865	880	787	776	727	650	625	600	444	125	100	95	72	20	9	8
R246	paralysis, ridigity	48	31															
R247	parasites	1865	880	444	440	125	95	72	20									
R248	parodonitis	2720	2489	2008	1800	1600	1550	880	802	787	776	727	522	465	444	146		
R249	pelvis inflammation	5000	2720	2489	1800	1550	802	787	776	727	625	600	522	500	465	444	428	95
R250	periosteum dysfunction	2720	1800	1600	880	787	776	727	625	465	48							
R251	peritonitis	800	787	727														
R252	pharyngitis	1600	1550	880	802	787	776	727	522	500	440	380	146	20				
R253	pharynx	10000	500	20														
R254	phobia	10000																
R255	pleuritis	5000	1865	1550	880	802	787	776	727	500	450	444	125	95	72	20		
R256	PMS	880	787	727														
R257	pneumonia	1550	880	802	787	776	727											
R258	pock	1550	880	802	787	727	20	5										
R259	polio	1550	1500	880	802	787	727	428	13									
R260	poliomyelitis	10000	5000	1500	880	804	787	727	428	13								
R261	pollinosis	10000	5000	880	787	727	20	2										
R262	polyp	2720	2489	2170	2128	2008	1800	880	787	727	690	650	625	600	440	146	20	
R263	preparation for operation	5000	1800	1600	1550	1500	880	832	802	787	776	727	522	465	444	428		
R264	prostatic hypertrophy	1550	880	802	787	727	465	20	9									
R265	prostatis	1550	880	802	787	727	465	20										
R266	psoriasis	5000	20															
R267	psychogenic delusion	10000	5000	880	787	727	100	20										
R268	pustules leg/feet	10000	880	787	727	465												
R269	rabies	120	20	15														
R270	rachitis, rickets	5000	500															
R271	rapid heartbeat	10000	1															
R272	rash	1800	880	787	727	522	146	5										
R273	renal enhancement	10000	880	820	440													
R274	renal insufficiency	1865	1600	1550	880	802	650	625	600	444	440	146	125	95	72	40	20	10
R275	renitis	120	20	1														
R276	respiratory organs	5000	1550	880	787	727	20											
R277	Reynauds Disease	727	465	20														
R278	rheumatoid arthritis	10000	2720	880	787	727	650	625	600	465	250	120						
R279	rheumatoid arthritis	10000	1550	880	802	787	727	650	625	600	465	250	28	20	10	9	8	3
R280	rigidity	10000	20															
R281	sarcoma	2127	2008	880	787	727	690											
R282	Sarcoma, Group 1	10000	6000	5000	3176	2720	2489	1989	1997	2005	2013	2021	2029	2037	2045	2053	2061	2069
R283	Sarcoma, Group 2	10000	6000	5000	3176	2720	2489	1992	2000	2008	2016	2024	2032	2040	2048	2056	2064	2072
R284	Sarcoma, Group 3	10000	6000	5000	3176	2720	2489	1995	2003	2011	2019	2027	2035	2043	2051	2059	2067	2075

R285	scarlet fever	880	787	727	690	465	20											
R286	senile ataxia	465	60	28	27													
R287	senile dementia	10000	20															
R288	sensitive mamilla	5000																
R289	sexuality dysfunction	2127	2008	880	802	787	727	690	666	650	625	600	465	125	95	73	72	20
R290	shoulder pain	10000																
R291	simple herpes	1550	1000	802	787	727	200											
R292	sinus	1550	880	802	787	727	522	125	72									
R293	skin bleeding	5000	800															
R294	skin eruption	5000	1550	802	787	727	9											
R295	skin sensory	5000	2720	2489	2170	1800	1600	1550	880	802	787	727	660	650	625	600	440	
R296	slash	5000	20															
R297	sleeping sickness	120	22	20														
R298	slow heartbeat	5000																
R299	small intestinal ulcer	880	440	10														
R300	sneeze	880	787	727	465	146												
R301	spleen enhancement	10000	2720	2170	1800	1550	880	802	787	727	465	100	35	20				
R302	sprain	110	9															
R303	staphylococcus infection	885	880	875	727													
R304	sterity	880	802	787	727	690	666	650	625	600	465	30	9	3				
R305	stiff shoulder	10000	880	802	787	727	100											
R306	stomatitis, aphta	880	787	727	465													
R307	streptococcus infection	885	880	875	727													
R308	streptomycin	10000	787	727	465	100	20											
R309	stroke of apoplexy+paralysis	10000	1865	1800	880	787	727	650	625	522	465	125	95	72	40	20	20	
R310	stutter	10000	20															
R311	sunlight allergy	330	3															
R312	suntroke	3040	880	522	444	440	190	146	95	20								
R313	swollen lymph gland	10000	880	440	100	10												
R314	syphilis	700	650	625	600	20												
R315	teeth decay	10000	3040	2720	1550	880	802	787	776	727	650	600	465	100	95	48		
R316	teeth enhancement	10000	20															
R317	tendon sheath inflammation	320	250	160	80	40	20	10	6	3	2	1						
R318	tennis elbow	250	1															
R319	testitis	1500	880	787	727	20												
R320	tetanus	880	787	727	600	500	400	20	5									
R321	throat edema	880	787	728														
R322	throat inflammation	885	880	875	787	776	727	660	465	428								
R323	thrombosis	1500	685	20														
R324	thyroid dysfunction	35	12															
R325	thyroid enhancement	160	80	20														

R326	thyroid overfunction	3	1															
R327	tinnitus	5000	20															
R328	tissue edema	880	787	727	522	465	444	440	148	146	6							
R329	tissue rheumatism	10000	2720	1550	880	802	787	727	465	100	20							
R330	tonsilitis	5000	1550	1500	880	802	787	776	727	650	625	600	465	73	14			
R331	toothache	3040	880	787	727	95	48	8										
R332	trauma	3040	880	787	760	727	465	190	95									
R333	traumatic pain	3040	95															
R334	trigeminus neuralgia	5000	2720	2489	2170	1800	1600	1550	880	832	787	776	760	725	650	428	146	28
R335	tuberclosis	10000	2127	2008	1600	1550	1500	802	800	776	727	690	500	465	20			
R336	tumor of central nervous system	2170	2127	880	690	666												
R337	typhus	1800	1570	1550	802	690	659	400	20									
R338	ulcer	2489	2170	2127	1800	1600	880	832	802	787	776	727	1					
R339	ureter stone	3040	880	787	727	20	3											
R340	ureter stricturization	880	787	727	660													
R341	ureteritis	2720	2170	2127	1800	1600	1550	1500	880	802	787	776	727	625	465	444	125	1
R342	varicose	28	1															
R343	vegetate dystony	10000	5000	40														
R344	vehicle sickness	10000	1865	650	625	600	522	465	146	125	95	72	20					
R345	vertebral rigidity	1550	880	802	787	776	727	725	625	428	110	95	60	14	10	8	1	
R346	vertigo	880	20	5														
R347	wart	2720	2489	2170	2127	2008	1800	1600	1500	787	727	690	495					
R348	worms	5522	5000	3032	1865	1223	834	800	562	522	444	125	120	100	95	72	60	20
R349	wound recovery delay (danger of infection)	880	787	727	220	190	20											
R350	yellow fever	10000	120	20														