Pointoselect digital

Digital point finder for auricular and body acupuncture with integrated PuTENS stimulation

User Instruction

Content

Intended use

The Pointoselect digital has been designed to locate, assess and treat body and auricular acupuncture points on the human body. It enables both, automatic and manual location of acupuncture points. Do not use this device for any other purpose.

Safe usage of the device

Please carefully read through the user instruction before using the device!

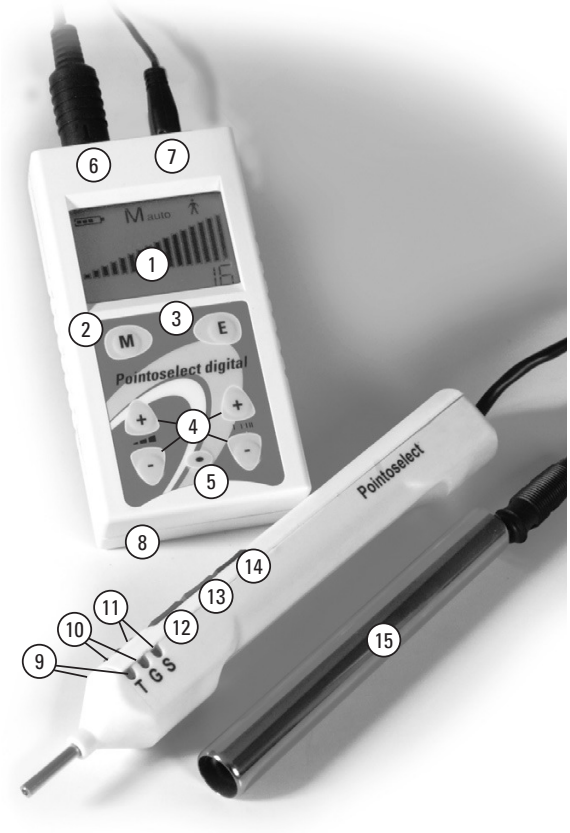
- The Pointoselect digital may only be used with original accessories.
- Keep the Pointoselect digital away from water or other liquids.
- Do not drop the Pointoselect digital. Do not handle it roughly or expose it to extreme temperatures or high humidity (only use at temperatures between 10 °C and 40 °C and at a relative humidity of less than 90 %).
- Never use the Pointoselect digital if it is malfunctioning or has been damaged in any way.
- After usage, store the Pointoselect digital in its original packaging to protect it against damage and contamination.

Warning!
The Pointoselect digital should not be used close to other electronic devices, in order to avoid interference. If this is not possible, the device must be observed during operation to ensure that the respective functions are operating correctly.

The application of the Pointoselect digital close to a short- or microwave device (e.g. 1 m) may cause variations of the stimulation parameters.
Patients with an implanted medical devices (e.g. a cardiac pacemaker) should consult their physician before treatment.

Description

1. Display
2. Mode button (automatic/manual)
3. Edit button
4. Adjustment buttons
5. On/off button
6. Connection socket for hand probe
7. Connection socket for hand electrode
8. Battery slot
9. „Therapy“ LED
10. „Gold“ LED
11. „Silver“ LED
12. Therapy button
13. Plus button
14. Minus button
15. Hand electrode

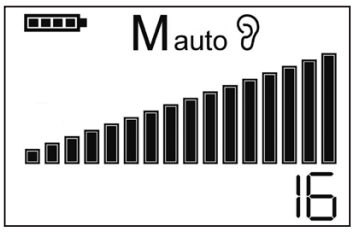


Operating the device

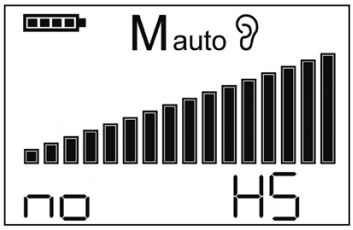
Setting up the device

Before starting the device, the supplied battery must be inserted into the battery compartment (see section „Battery change“).
The hand probe and the hand electrode must be connected to the respective output sockets of the Pointoselect digital.

Starting the device



Start the Pointoselect digital by pressing the ⊙ button. The display screen shown left appears. The most recently used settings are now loaded.
The battery symbol on in the upper left hand side of the display shows the state of charge. In case the battery is fully loaded, all battery segments within the battery symbol are visible. The segments gradually disappear as the battery voltage decreases.



After 2 minutes of no use (measurement or stimulation) the device switches off automatically.
If the hand probe is not correctly connected to the Pointoselect digital, „no HS“ appears in the display (see illustration left).

Mode selection

The Ⓜ button is used to switch between the following operating modes:

M auto — Automatic measurement

M man — Manual measurement

S — Stimulation
Displays stimulation settings and adjustments

The Ⓔ button is used to switch between body mode and ear mode. These options can only be selected in „automatic measurement“ and „manual measurement“ operating modes.

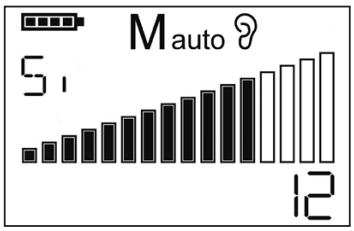
Ear

Go — Ear-Gold
Only gold points are detected and displayed.

Si — Ear-Silver
Only silver points are detected and displayed.

Body
IMPORTANT! In „body“ mode only the inner sensor is analysed. The gold/silver detection ist not active and therefore not shown in the display.

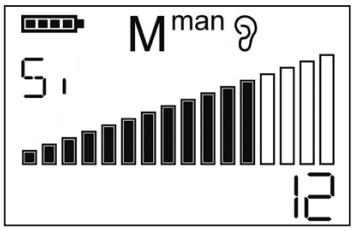
Measurement



Automatic

In automatic mode the inner and outer sensors of the hand probe continuously take measurements.

The reference voltage changes automatically. It is displayed through a bar readout and a respective number below.
Each degree of sensitivity is related to a certain tone pitch.



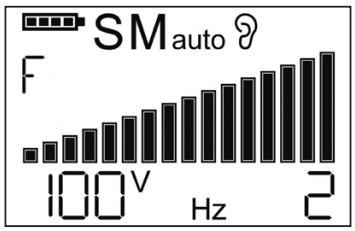
Manual

When this operating mode is selected, the inner and outer sensors of the hand probe continuously take measurements.
The reference voltage can be changed in 16 stages using the left ⊕/⊖ keys on the device console or the ⊕/⊖ keys on the hand probe. The modified reference voltage is shown by the bar readout and by the number at the bottom right of the display. A specific signal tone pitch level is assigned to each reference voltage value. If the reference voltage is lower than the values measured by the inner and outer sensors the signal tone stops.

Gold/silver detection

When a gold point is detected „Go" appears in the display and the green LEDs on the hand probe light up. The signal tone is continuously.
When a silver point is detected „Si" appears in the display and the yellow LEDs on the hand probe light up. The signal tone sounds with a frequency of 2 Hz.
On Ear-Gold modulation, only gold points will be detected and displayed.
On Ear-Silver modulation, only silver points will be detected and displayed.
Attention!
On „Body" modulation, only the inner sensor of the Pointoselect digital is operating. No Gold/Silver-detection is completed or displayed.

Stimulation

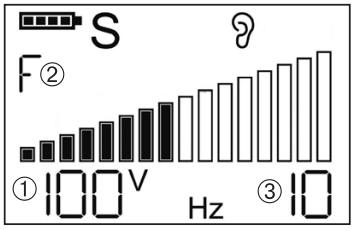


Stimulation can be carried out in every operating mode

When pressing the Ⓣ button on the hand probe, the probe stimulates between the inner and outer sensors according to the selected stimulation settings. The letter „S", the intensity and the frequency appear in the display (see illustration) and the red LED at the hand probe will light up.

The intensity can be modified during stimulation using the left ⊕/⊖ keys on the device console or the ⊕/⊖ keys on the hand probe.

The frequency can be modified during stimulation using the right ⊕/⊖ keys on the device console.

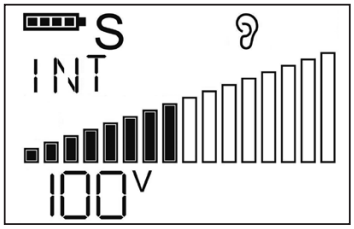


Adjusting the stimulation settings

The stimulation settings can only be modified in the „Stimulation" operating mode. An overview appears in the display showing the selected intensity ①, frequency range ② and frequency ③ (see illustration). To adjust the stimulation setting intensity, press the Ⓔ button.

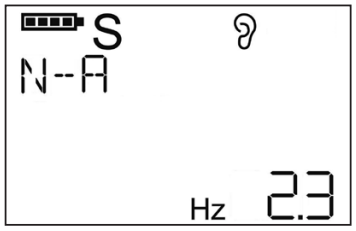
Pressing the Ⓔ button again switches to the next stimulation setting (frequency). Pressing the Ⓔ button once more switches to the next stimulation setting.

Sequence: Intensity-frequency range-frequency pulse width



Adjusting the intensity

The intensity can be set to the desired value using the left ⊕/⊖ buttons on the device console. The voltage level is shown in the display. It can be adjusted in steps of 2 V in a range of 0 to 200 V (see illustration).



Adjusting the frequency

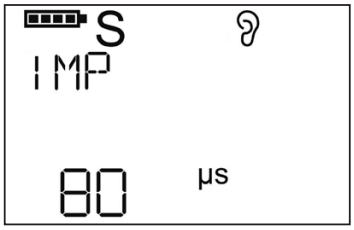
The left ⊕/⊖ buttons on the display console are used to switch between various frequency ranges or a user-defined frequency.

Sequence: User defined frequency-Nogier-Bahr-Reininger

The right ⊕/⊖ buttons on the device console can be used either to select a user-defined frequency or to select a frequency from the pre-set frequency range (illustration shows „Nogier A").

Frequency range (partly devided through 128):

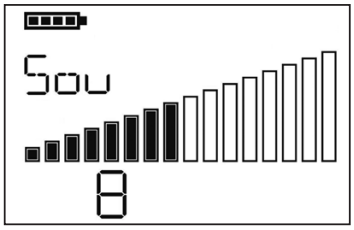
Nogier		Bahr		Frequences of meridian by Reininger/Bahr			
A	2,3 Hz	1'	4,6 Hz	1'	6,44 Hz	lung	7' 5,21 Hz bladder
B	4,6 Hz	2'	9,4 Hz	2'	4,32 Hz	large intestine	8' 4,77 Hz kidney
C	9,1 Hz	3'	18,7 Hz	3'	3,68 Hz	stomach	9' 4,14 Hz circulation
D	18,3 Hz	4'	37,5 Hz	4'	5,48 Hz	spleen/pancreas	10' 5,72 Hz triple warmer
E	36,5 Hz	5'	74,9 Hz	5'	3,88 Hz	heart	11' 4,55 Hz gall bladder
F	73,0 Hz	6	149,9 Hz	6'	6,18 Hz	small intestine	12' 3,45 Hz liver
G	146,0 Hz	7'	2,3 Hz				



Adjusting the pulse width

The pulse width can be set to the desired value using the left ⊕/⊖ buttons on the device console. The pulse width is shown in the display. It can be adjusted in steps of 10 µs in a range of 60 to 120 µs (see illustration).

Adjusting the volume of the signal tone



To adjust the volume, press the Ⓜ button and the left ⊖ button on the device console when the device is starting up. The display screen shown left appears.

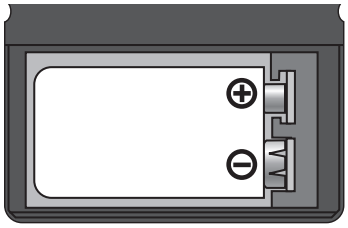
The volume can be set to the desired value from 0-8 using the left ⊕/⊖ buttons on the device console. The signal tone is switched off entirely at „0". In this case the following symbol appears in the display:  Signal tone deactivated

Switching the device off

Press the ⊙ button to switch off the device.

If the battery voltage falls below the critical value or the device detects no valid measurements over a two-minute period and no stimulation is started, the device switches off itself.

Battery change



During operation, the voltage of the battery is shown by the segments inside the battery symbol. If the voltage falls below the critical value, the Pointoselect digital switches off itself and/or cannot be switched on again. A new 9 V battery (e.g. Type 6LR61) must be inserted into the device.

- Switch off the device.
- Open the battery compartment.
- Remove the used battery from the battery compartment.
- Insert a new battery according to the diagram. When inserting the new battery check the polarity. A protective circuit protects the device from damage caused by connecting the battery incorrectly.
- Close the battery compartment.

Always remove the battery if the device will not be used for a long period of time.

If rechargeable batteries are used, follow the instruction manual of the battery charger.

Used batteries must be returned to retailers or community collection points as per the battery usage regulations.

General Information

Description of symbols

Attention: Read Opertaion Instructions!

BF type application part.
Protection against electric shock.

REF The article or order number of the product follows this symbol.

SN The serial number of the product follows this symbol.

The year of construction of the product follows this symbol.

This equipment is marked with the recycling symbol. It means that at the end of the life of the equipment you must dispose of it separately at an appropriate collection point and not place it in the normal domestic unsorted waste stream. This will benefit the environment for all.

CE 0197 Conform with Council Directive 93/42/EEC of 14 June 1993 concerning medical devices.

Technical data

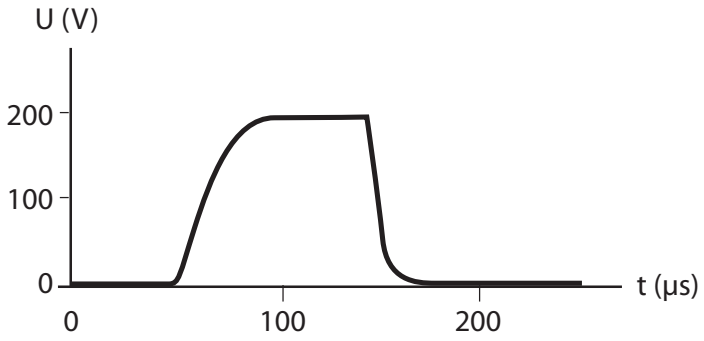
Acupuncture point finder with automatic and manual location functions and integrated stimulator.

Power supply:	9 V block battery
Dimensions:	approx. 115 mm x 60 mm x 30 mm
Weight:	approx. 123 g (without accessory)

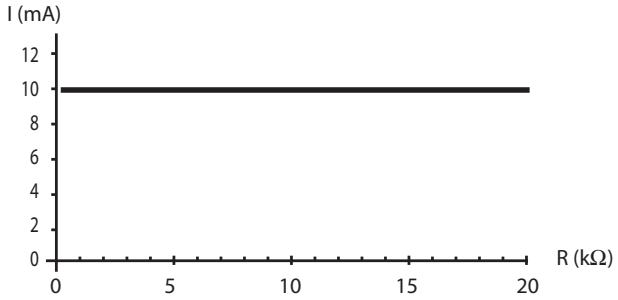
Point finder	
Current consumption:	approx. 17 mA (without signal tone)
	approx. 30 mA (with signal tone)

Stimulator	
Current consumption:	approx. 28 mA (under 20 kΩ load at 128 Hz and 120 µs)
Output voltage:	200 V (under 20 kΩ load)
Frequency range:	2-128 Hz
Pulse width:	60-120 µs

Maximum stimulation pulse under 20 kΩ load



Electric current according to resistive load



Classification

The Pointoselect digital is rated as a class IIa medical device according to annex IX of EC directive 93/42/EEC concerning medical devices.

Recalibration, changes and repairs

The manufacturer is only responsible for the safety and performance of the Pointoselect digital if recalibration, modifications and repairs are carried out by persons authorized by the manufacturer and if the Pointoselect digital is operated in accordance with the instruction manual.

Circuit diagrams, spare parts lists and calibration instructions

Upon request we will provide circuit diagrams, spare parts lists and calibration instructions to suitably qualified technicians.

Guarantee

The Pointoselect digital is supplied with a 2-year guarantee from purchase date. This guarantee does not cover expendable items (e.g. cable, battery).

Care and cleaning

No special care or cleaning agents are necessary for the Pointoselect digital. The Pointoselect digital and the hand probe should be cleaned with a soft, lint-free cloth. Alcohol (80 %) applied to a soft cloth can be used for cleaning purposes. Particular care must be taken when cleaning the tip of the hand probe. Tissue and fat deposits can collect between the inner and outer sensors and cause faulty measurements. To clean, retract the outer sensor and wipe the inner sensor with a suitably treated piece of cotton wool.

Ensure that no moisture enters the device. If moisture does enter the device, then the device must undergo a technical inspection before being used again.

Combinations

The Pointoselect digital may be used in combination with all items included in the delivery package.

Included in delivery

Quantity	Item	Item no.
1	Pointoselect digital	200506
1	Hand probe	200507
1	Hand electrode	250200
1	Battery	602000
1	5.24 cable	106242
1	Belt clip	106752
1	User Instruction	100858

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Art. no. 451600-0249

CE 0197