

# HiToP<sup>®</sup> Units and Accessories



## Origin of the HiToP®- Therapy

HighTone power therapy is a new quantum leap in the field of electro therapy.

Conventional electro therapy stimulates nerves and muscles. The primary aim of HighTone power therapy is a direct effect on the metabolism of the cells.

The differences can be seen in **effect, technology and practical use.**

The differences in effect relate to two main mechanisms of HighTone power therapy: Firstly, it introduces energy into the body to increase the cell energy potential. Secondly, it makes the cell structures oscillate to normalise the metabolism.

From the technical point of view the classical electro therapy is a modulation of amplitude: The current intensity is modulated, but the frequency remains constant. Electro therapy uses modulation frequencies between 0 and 200 Hertz in the low frequency range, and mostly 4.000 Hertz in the medium frequency range as carrier frequency.

In HighTone power therapy the amplitude and the frequency are modulated simultaneously. The higher the frequency, the more energy can be introduced correlating to the individual threshold curve of the patient's electro-sensitivity.

Thus, it is a **SIMULTaneous Frequency and Amplitude Modulation**. In the following it will always be called **SimulFAM®i**.

The letter 'i' stands for intensity, which increases simultaneously with rising frequency.

In the HighTone power therapy device **HiToP®** uses HighTone frequencies between 4.096 and 32.768 Hertz.

■ HighTone power therapy differs in two further practical points:

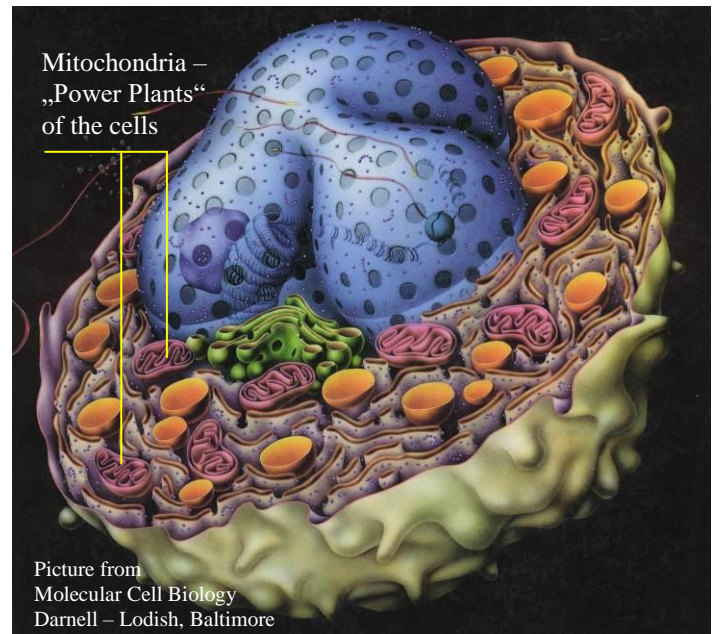
1. Classical electro therapy is applied for 5 to 10 minutes, but HighTone power therapy up to 60 minutes.

2. In classical electro therapy, as a rule, one channel and two electrodes are used. In HighTone power therapy up to 4 channels are in parallel operation, with 10 electrodes.

## What are the two main effects of HiToP®- Therapy?

■ Introduction of energy into the body in order to activate the cells and to vitalise the body.

■ Creation of resonances in order to make the cells and the tissue structures oscillate, with the aim to improve metabolic processes and to relieve pain.



## HiToP® HighTone Power Therapy

In 1935, Siegfried Koeppen already thought about the possibilities to use tone frequency therapy.

Dr. med. Hans-Ulrich May is recognized as the „father“ of the modern HighTone Therapy. Since 1988, he has been studying the variously effective applications very successfully.

## Therapeutic efficiency

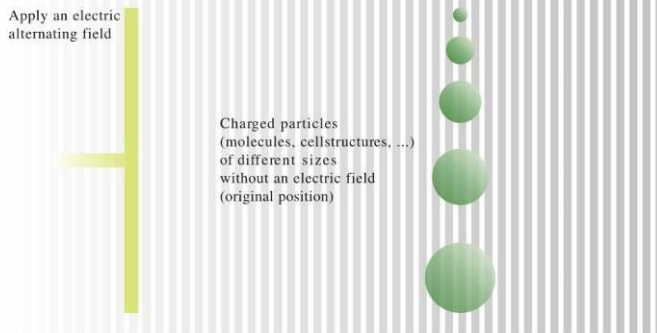
Already after the first treatment, 60 – 80 % of the patients do not have any troubles anymore or experience a great relief of pain (according to a patients' survey in 2001).

## Practical efficiency

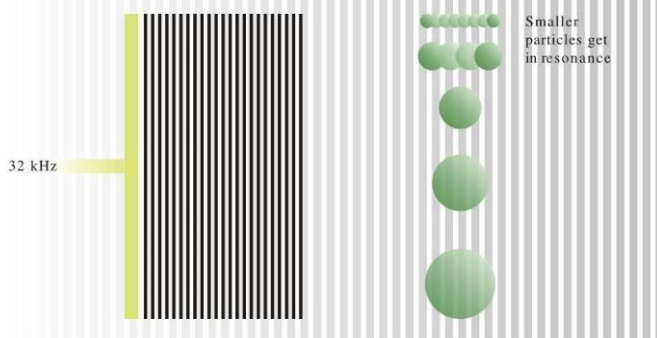
Patients with various kinds of pain syndromes (e.g. gonarthrosis, coxarthrosis, lumbar spine syn-drome, cervical spine syndrome, shoulder-arm-syndrome, etc.) experience significant relief of their pains which could not be achieved by conventional therapy methods by now.

This also means fast mobilization as well as the return to the required powerfulness for the working patient who has a job. Elderly people will feel much more vitality and their quality of life will increase.

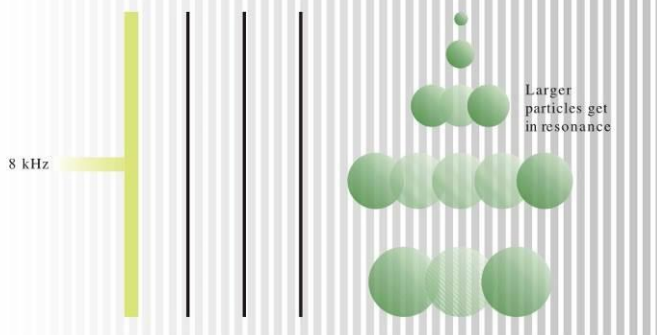
## Resonance phenomena



## Resonance: Rising Frequency



## Resonance: Sinking Frequency



## What makes the cell and tissue structures oscillate?

The applied frequencies range from 4.096 to 32.768 Hertz over 3 octaves in 72 quarter-tone steps of 1 second each. The tones in the three octaves are the same that are used in standard music.

These high tone frequencies between 4.096 and 32.768 Hertz pass through the body in form of an electrical field that makes the charged particles oscillate.

The frequencies of the oscillations introduced create resonances in the molecules and cell structures.

Different frequencies activate structures of different size. For this reason it is important to offer a broad spectrum of frequencies.

The oscillations of the different particles in the tissue lead to many effects. One of them is a strongly increased distribution of pain and inflammation mediators as well as a positive effect on the transport of nutritive and waste substances.

Thus, the result is an improvement of metabolic processes, purging and pain relief.

## How is the energy introduced into the cells?

The threshold curve of the electrosensitivity defines how much energy can be introduced into the body. The higher the frequency of the energy entered, the more energy the human body is able to tolerate.

The goal is to transfer as much energy as possible to the body. This can be achieved with high frequencies. The HighTone power therapy operates in the range between 4.096 and 32.768 Hertz. Up to 5.000 mWatt are introduced directly into the body.

HighTone power therapy increases the mitochondria in amount and size, the so-called energy „power stations“.

After the therapy the patient feels refreshed, just like after a long walk.

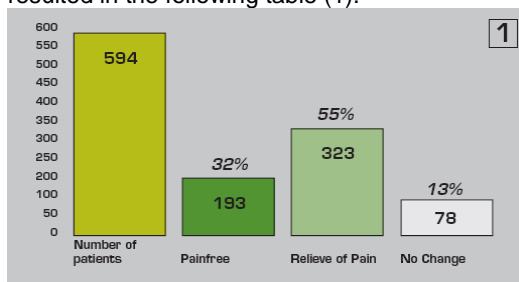
This energy input is made twice: once locally in the area to be treated and simultaneously on the whole body.

The whole-body vitalization is important, for a disease is rarely limited to one area. The resistance of the whole body is improved.

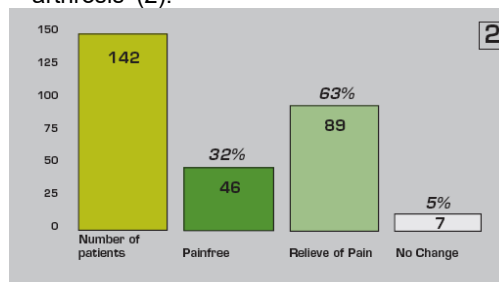
## HighTone Power Therapy is a very efficient therapy

70 to 80 % of all patients experience a pain relief or are even free of pain altogether after the first treatment.

■ The first treatment of almost 600 patients resulted in the following table (1).



■ The result is even better with the indication 'knee arthrosis' (2).





## HiToP<sup>®</sup> 4 touch Electrotherapy of the next generation

### A four-channel pain therapy device for a holistic treatment of the patient

With its innovative and unique device HiToP<sup>®</sup> 4 touch gbo Medizintechnik AG presents to the user local and holistic therapies for different indications. Yet the user interface gives a maximum level of usability: With one single touch you can select a therapy from your personal list of favorites. Simply turning the intensity regulator allows a real quickstart. The modern high-tech design with brushed aluminum surface and the 15" TFT LC D full color touch screen monitor offer to the health care professional an indispensable feature.

#### Medical programs:

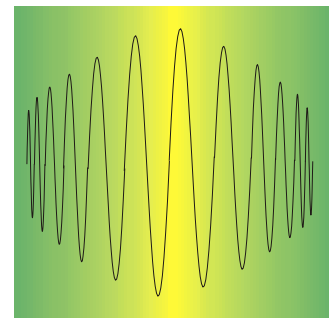
- SimulFAM<sup>®</sup> i
- Reha
- Mobilization
- Muscle pump
- Trauma
- Lymphatic drainage
- Edema
- Pain
- Nerveblock
- Universal
- Polyneuropathy

#### Wellness programs:

- Vitalization
- Sport
- Elektro massage
- Shaking massage
- Lipolysis
- Fatburning
- Bodyshaping
- Cellulite

#### The most important advantages at a glance:

- 4 independent channels for the treatment in four areas
- Individual display for each channel
- Easy operation by touch screen
- Graphic display: pictures with applications demonstrate the placement of the electrodes
- Safety circuit to avoid voltage sensations caused by bad electrode placement
- No side effects



Channels	4 independent channels
Display	15" TFT LCD
Operating frequencies	0.1 - 200 Hz 4096 – 32768 Hz
Timer	1 – 90 min
Supply voltage	100-240 V, 50-60 Hz
Power consumption	max 200 VA
Class of protection	I
Degree of protection	BF
Equipment class	Ila
Dimension	28.5 x 36 x 37.3 cm (H x W x L)
Weight	11 kg without accessories
Warranty	24 months

Subject to technical changes  
without prior notice.





## HiToP<sup>®</sup> 2 touch Electrotherapy of the next generation

### A two-channel pain therapy device

With its innovative and unique device HiToP<sup>®</sup> 2 touch gbo Medizintechnik AG presents to the user local and holistic therapies for different indications. Yet the user interface gives a maximum level of usability: With one single touch you can select a therapy from your personal list of favorites. Simply turning the intensity regulator allows a real quickstart. The modern high-tech design with brushed aluminum surface and the 15" TFT LC D full color touch screen monitor offer to the health care professional an indispensable feature.

### Medical programs:

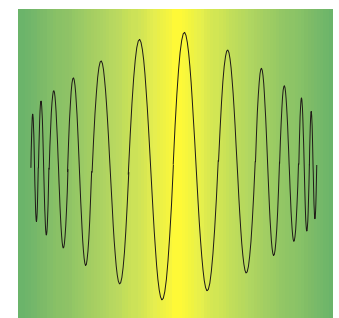
- SimulFAM<sup>®</sup> i
- Reha
- Mobilization
- Muscle pump
- Trauma
- Lymphatic drainage
- Edema
- Pain
- Nerveblock
- Universal
- Polyneuropathy

### Wellness programs:

- Vitalization
- Sport
- Elektro massage
- Shaking massage
- Lipolysis
- Fatburning
- Bodyshaping
- Cellulite

### The most important advantages at a glance:

- 2 independent channels for the treatment in different areas
- Individual display for each channel
- Easy operation by touch screen
- Graphic display: pictures with applications demonstrate the placement of the electrodes
- Safety circuit to avoid voltage sensations caused by bad electrode placement
- No side effects



Channels	2 independent channels
Display	15" TFT LCD
Operating frequencies	0.1 - 200 Hz 4096 – 32768 Hz
Timer	1 – 90 min
Supply voltage	100-240 V, 50-60 Hz
Power consumption	max 170 VA
Class of protection	I
Degree of protection	BF
Equipment class	Ila
Dimension	28.5 x 36 x 37.3 cm (H x W x L)
Weight	10.8 kg without accessories
Warranty	24 months

Subject to technical changes  
without prior notice.



## HiToP<sup>®</sup> 1 touch Electrotherapy of the next generation

### A one-channel pain therapy device

The HiToP<sup>®</sup> 1 touch - the latest member of the innovative and unique HiToP<sup>®</sup> family of gbo Medizintechnik AG - provides local and holistic pain therapy as well as therapies for other indications. The user interface provides a maximum level of usability. With a single touch one can select a desired therapy out of the personal list of favorites. The therapy is started by simply turning the intensity regulator. The modern high-tech design made of brushed aluminium and the 10" TFT LCD full color touch screen monitor are an essential tool for the therapist. As with all other HiToP<sup>®</sup> devices the user can choose the individual language.

### Medical programs:

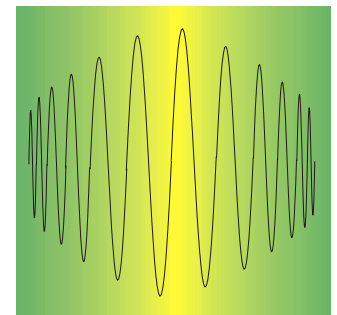
- SimulFAM<sup>®</sup> i
- Reha
- Mobilization
- Muscle pump
- Trauma
- Lymphatic drainage
- Edema
- Pain
- Nerveblock
- Universal
- Polyneuropathy

### Wellness programs:

- Vitalization
- Sport
- Elektro massage
- Shaking massage
- Lipolysis
- Fatburning
- Bodyshaping
- Cellulite

### The most important advantages at a glance:

- Easy operation by touch screen
- Graphic display: pictures with applications demonstrate the placement of the electrodes
- Safety circuit to avoid voltage sensations caused by bad electrode placement
- No side effects



Channels	One channel
Display	10,1" TFT LCD
Operating frequencies	0.1 - 200 Hz 4096 – 32768 Hz
Timer	1 – 90 min
Supply voltage	100-240 V, 50-60 Hz
Power consumption	max 45 VA
Class of protection	I
Degree of protection	BF
Equipment class	Ila
Dimension	6 x 27 x 24,5 cm (H x W x L)
Weight	2,5 kg without accessories
Warranty	24 months

Subject to technical changes  
without prior notice.

# HiToP<sup>®</sup> Bed & Device Cart

Part. No.: 027-0-1000 & 026-0-2000



## HiToP<sup>®</sup> Bed

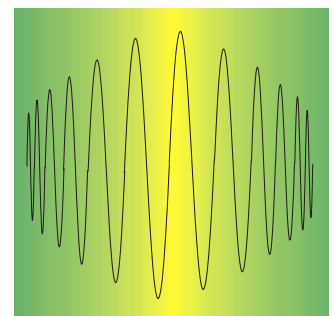
**Our treatment bed is especially designed for the treatment with HiToP<sup>®</sup>-therapy**

The newly designed device cart rounds out the usability concept, for each accessory has its defined position. The treatment bed offers many details to render the treatment even more comfortable. Patients as well as health care professionals benefit from functions like quicker fixing of patient cables and electrodes, heated surface of the bed and the possibility to warm up the electrodes.

## The most important advantages at a glance:

- Quicker fixing of the patient cables and electrodes
- Heated surface of the bed
- Possibility to warm up the electrodes
- Device cart with defined position for each accessory

<b>Bed</b>	
Dimesions	75 x 82 x 204cm (H x B x T)
Weight	48 kg
Protection class	I
<b>Cart</b>	
Dimesions	106 x 45 x 50,5 cm (H x B x T)
Weight	14.8 kg without accessories
Warranty	24 months
Subject to technical changes without prior notice..	







# HiToP<sup>®</sup> accessories



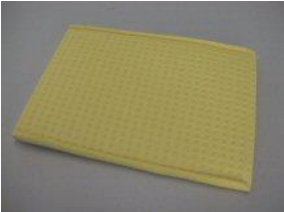
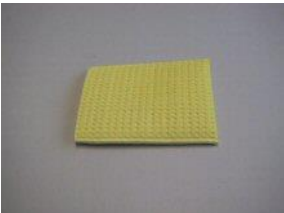


	Part-No.	Specification	Use	Application	Remarks
	017-0-0030	HiToP <sup>®</sup> distribution cable red for channel I	HiToP <sup>®</sup> 4 touch, HiToP <sup>®</sup> 2 touch, 172, 181		same as for HiToP <sup>®</sup> 184
	017-0-0031	HiToP <sup>®</sup> distribution cable green for channel II	HiToP <sup>®</sup> 4 touch, HiToP <sup>®</sup> 2 touch, 172		same as for HiToP <sup>®</sup> 184
	017-0-0032	HiToP <sup>®</sup> distribution cable yellow for channel III	HiToP <sup>®</sup> 4 touch		same as for HiToP <sup>®</sup> 184
	017-0-0033	HiToP <sup>®</sup> distribution cable blue for channel IV	HiToP <sup>®</sup> 4 touch		same as for HiToP <sup>®</sup> 184
	017-0-0034	Set of red patient cables for channel I includes: 2 cables 1 m with black plug and 4 cables 1 m with white plug	HiToP <sup>®</sup> 4 touch, HiToP <sup>®</sup> 2 touch, 172, 181		
	017-0-0035	Set of green patient cables for channel II includes: 2 cables 1 m with black plug and 4 cables 1 m with white plug	HiToP <sup>®</sup> 4 touch, HiToP <sup>®</sup> 2 touch, 172		
	017-0-0036	Set of yellow patient cables for channel III includes: 2 cables 1 m with black plug and 4 cables 1 m with white plug	HiToP <sup>®</sup> 4 touch		



# HiToP<sup>®</sup> accessories

	Part-No.	Specification	Use	Application	Remarks
	017-0-0037	set of blue patient cables for channel IV: includes 2 cables 1 m with black plug and 4 cables 1 m with white plug	HiToP <sup>®</sup> 4 touch		
	017-0-0071	set of red patient cables for channel I: includes 2 cables 1.3 m with black plug and 4 cables 1.3 m with white plug	HiToP <sup>®</sup> bed		
	017-0-0072	set of green patient cables for channel II: includes 2 cables 1.3 m with black plug and 4 cables 1.3 m with white plug	HiToP <sup>®</sup> bed		
	017-0-0073	set of yellow patient cables for channel III: includes 2 cables 1.3 m with black plug and 4 cables 1.3 m with white plug	HiToP <sup>®</sup> bed		
	017-0-0074	set of blue patient cables for channel IV: includes 2 cables 1.3 m with black plug and 4 cables 1.3 m with white plug	HiToP <sup>®</sup> bed		

# HiToP<sup>®</sup> accessories

	Part-No.	Specification	Use	Application	Remarks
	017-0-0046	conductive rubber electrode 175 x 115 mm set of 2 pcs	with Aloe Vera spray	with elastic strap	
	017-0-0047	conductive rubber electrode 120 x 80 mm set of 2 pcs	with Aloe Vera spray	with elastic strap	
	020-453813	viscose sponge pocket for conductive rubber electrode 175 x 115 mm, (2 pcs.)		with elastic strap	moisten well
	45-38-203 EH725	viscose sponge pocket for conductive rubber electrode 120 x 80 mm (10 pcs.)		with elastic strap	moisten well
	017-0-0062	Easy-Fix-electrode 120 x 80 2 mm connector set of 2 pcs.		fix with elastic strap 017-0-0059	
	017-0-0060	Easy-Fix-electrode 80 x 60 2 mm connector set of 2 pcs.		fix with elastic strap 017-0-0059	







# HiToP<sup>®</sup> accessories

	Part-No.	Specification	Use	Application	Remarks
	017-0-0063	sponge for Easy-Fix-electrode 120 x 80 Set = 10 pcs.			moisten well
	017-0-0061	sponge for Easy-Fix-electrode 80 x 60 Set = 10 pcs			moisten well
	011-0-0033	elastic strap with Velcro-fastener, 70 cm long, 7.5 cm wide 2 pcs.	to fix rubber electrodes		
	017-0-0090	elastic strap with Velcro-fastener, 60 cm long, 5 cm wide 4 pcs blue.	for Easy-Fix-electrodes  washable		
	002-2-0073	Aloe Vera spray bottle of 473 ml	to establish good contact between skin and rubber electrodes		

# HiToP<sup>®</sup> accessories

	Part-No.	Specification	Use	Application	Remarks
	017-0-0025	cable clip 5 pieces	to fix the distribution cable onto the bed or clothes		
	017-0-0039	Headphones for music replay			Models sold may vary from head phone shown on the picture
	011-0-0017	transport case for HiToP <sup>®</sup> 181-H			
	026-0-2000	UNICAR <sup>®</sup> basic rack	for HiToP <sup>®</sup> 4 touch and HiToP <sup>®</sup> 2 touch		
	026-0-2020	tray for electrodes and cables <sup>®</sup>	for HiToP <sup>®</sup> 4 touch and HiToP <sup>®</sup> 2 touch		
	027-0-1000	HiToP <sup>®</sup> Bed  Stand-alone version	can also be used with HiToP <sup>®</sup> 184		Attention! Comes without patient cables
	017-0-0075	infrared BOX  accessory for HiToP <sup>®</sup> 181-H	programming of HiToP <sup>®</sup> 181-H by a PC with USB interface		

# HiToP<sup>®</sup> accessories

	Part-No.	Specification	Use	Application	Remarks
	017-0-0130	conductive rubber electrode with cable 6 x 8 cm², 2 mm connector	with sponge pockets 45-39-110 EH725	with rubber- or elastic-strap	
	017-0-0120	conductive rubber electrode with cable, 3 x 4 cm², 2 mm connector	with sponge pockets 45-39-102 EH725	with rubber- or elastic-strap	
	45-39-110 EH725	sponge pockets medium, 10 pcs. for electrodes 6 x 8 cm	for conductive rubber-electrodes	with rubber- or elastic-strap	moisten well
	45-39-102 EH725	sponge pockets small, 10 pcs. for electrodes 3 x 4 cm	for conductive rubber-electrodes	with rubber- or elastic-strap	moisten well
	017-0-0077	Vaginal electrode With 2 mm connector			
	017-0-0076	Anal electrode With 2 mm connector			



[illegible]

