

# Interference Units and Accessories

Duodynator® Neoserv®



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## **Duodynator**®



### **Duodynator**®

The compact and economic therapeutic device for interferential, MF- and LF therapy.

Continued technical improvements led to the Duodynator®, with the focus on medium-frequency currents which are particularly pleasant and comfortable for the patients. The Duodynator® comes with two channels. It can therefore be used as:

- (a) an interferential device, where the desired stimulation effect is achieved by the transposition of two medium-frequency currents with different frequencies deep inside the tissue.
- (b) a 2-channel MF-device, with which the user can treat the patient at two different points with a user selected current waveform and intensity, using the two totally independent channels.
- (c) a low frequency unit with the classic currents of electrotherapy.

See next page for details of the currents.

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

Part. No.: 032-0-2000

- 2 channel interference
- 2 independent channels for the treatment of two
- The carrier frequency is user-defined between 2.5 kHz and 10 kHz
- Easy operation: the treatment is selected from a menu offering different programs
- The programs are comprised of the complex sequences involved in individual therapies, each of which is coordinated with the rest
- Programs for classical medical applications and wellness applications
- Safety circuit to avoid voltage sensations caused by bad electrode placement
- No side effects

Duodynator® can be combined with the Neoserv® vacuum suction unit.



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#### ONE TOUCH TO START

The new Duodynator® by gbo Medizintechnik AG has a large spectrum of therapies. At the same time the user interface is so clear, that it offers a maximum level of usability. With one single touch the user can select a therapy from his personal list of favorites. Simply turning the intensity regulator allows a real quick start. Additionally, the modern high-tech design with brushed aluminum surface and the 10" TFT LCD full color touchscreen monitor offers the doctor "that certain extra" to just having a technically sophisticated electrotherapy unit.

Channels 2 independent channels for

interference current or 2 channel MF current

10.1" TFT LCD Touchscreen Display

Operating frequencies 0.1 - 200 Hz Carrier frequencies 2.5/ 4/ 6/ 8/ 10khz

Timer  $1 - 60 \, \text{min}$ 

100-240 V, 50-60 Hz Supply voltage Power consumption max 65 VA

Class of protection Degree of protection BF Class of equipment

Dimension  $27 \times 19.3 \times 28 \text{ cm} (WxHxD)$ Weight 4,3 kg without accessories

Warranty 24 months

Subject to technical changes

without prior notice.

gbo Medizintechnik AG

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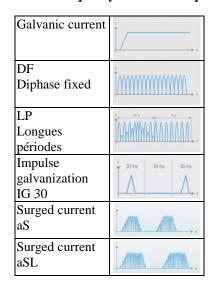
## **Duodynator**®

Part. No.: 032-0-2000

## List of currents

## **Low frequency currents**

All low frequency currents except Galvanic current are also available as metal- acceptable biphasic variant.



Ultra Stimulation	1
CP Courtes périodes	**************************************
MM Monophasé modules	55 55
Impulse galvanization IG 50	50 ms 70 ms 50 ms
Tens	
Tens burst	

Faradic current	1 ms 19 ms 1 ms
MF Monophasé	†^ ^ ^ ^ ^ ^ ^ ^ ^ ^ ^ ^ ^ ^ ^
fixed	<b> </b>
RS	I 15 * e 15 *
Rhythme	
syncope	† † † † † † † † † † † † † † † † † † †
Frequency	hore concernors
modulation	
FM / 7 - 14 Hz	1
E100	100ms 500ms
E200	1000ms

## **Medium Frequency currents**

Russian	<b>†</b>	Gym Current	1 200   400   200   ms ms ms ms	MF sinus-	÷
stimulation	<u> </u>		<del></del>	modulated	<b>₩</b>
(Kots)	2.5 kHz				1.40004.40004.4000

#### The modulated medium frequency is available with the following programs:

#### Medical programs:

rehab, mobilization, muscle pump, trauma, lymph drainage, edema, pain, universal, Russian stimulation

#### Wellness programs:

sports, electro massage, shaking massage, lipolysis, fat burning, body shaping, cellulite

## **Interference currents**

Interference	Mark alle alle	Dipole vector	talling alling the state of the	Isoplanar Vector
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Neoserv



## Neoserv<sup>®</sup>

#### A powerfull partner for electrotherapy.

The Neoserv ® is a suction wave therapy unit equipped for the use with 2 or 4 suction electrodes, especially prepared for the combination with our Duodynator<sup>®</sup>.

In suction-wave massage therapy an adjustable vacuum - either continuoustype or pulse-type - is generated inside the suction electrodes by an electric pump.

The use of a new technology inside the Neoserv® permits a suctionwave massage.

In the areas where the suction electrodes are applied, increased hyperaemia incurs. This leads to the desirable effect that tissue conductivity beneath the electrodes is improved.

However, sensitivity to the electric current is clearly masked by the pulsating sucking action of the electrodes - a fact that makes the device suitable for use also with patients who are extremely sensitive to electric currents.

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

Part. No.: 032-0-4000

- Easy and timesaving placement of the electrodes, without rubber bands and elastic bands
- Massages and aids blood circulation in the area of application
- Up to 4 suction electrodes can be connected
- Continuously adjustable vacuum
- Continuously adjustable suction cycle
- Particularly quiet thanks to the high-quality. pressure-regulated pump

The Neoserv® has to be combined with the interference unit Duodynator®.



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Vacuum Continuous adjustment of

vacuum and suction cycle, controlled by microcontroller

Treatment time Depending on the type of

electrostimulation device used

Max. vacuum 300 mbar

Supply voltage Power consumption Class of protection

Degree of protection BF Class of equipment

Dimensions Weight Warranty

100-240 V, 50-60 Hz

max 105 VA

 $27 \times 17.2 \times 28 \text{ cm} (W \times H \times D)$ 3.3 kg without accessories

24 months

Subject to technical changes without prior notice.

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# Accessories **Duodynator**®

	Part-No.	Specification	Use	Application	Remarks
5	032-0-2010	Connection cable for DUO channel I + II			
	017-0-0047	Conductive rubber electrode 120 x 80 mm Set = 2 pcs			
	017-0-0046	Conductive rubber electrode 175 x 115 mm Set = 2 pcs			
	45-38-203 EH725	Viscose sponge pocket for conductive rubber electrode 120 x 80 mm, (10 pcs.)			
	020-453813	Viscose sponge pocket for conductive rubber electrode 175 x 115 mm, (2 pcs.)			
	011-0-0033	Elastic strap with Velcro-fastener, 70 cm long, 7.5 cm wide 2 pcs. blue			
	032-0-2020	Standard accessory set Duodynator			Consists of: Connection cable ,4 electrodes 120 x 80, 4 elastic straps, 10 sponge pockets

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# Accessories **Duodynator**®

Part-No.	Specification	Use	Application	Remarks
017-0-0062	Easy-Fix-Electrode 120 x 80 2 mm connector set = 2 pcs.		Fix with elastic strap 017-0-0059	
017-0-0060	Easy-Fix-Electrode 80 x 60 2 mm connector set = 2 pcs.		Fix with elastic strap 017-0-0059	
017-0-0063	Sponge for Easy-Fix-Electrode 120 x 80 Set = 10 pcs.			
017-0-0061	Sponge for Easy-Fix-Electrode 80 x 60 Set = 10 pcs			
017-0-0090	Elastic strap with Velcro-fastener, 60 cm long, 5 cm wide 4 pcs blue.	For Easy-Fix- Electrodes		
014-0-0088	Hand piece electrode set consisting of electrode holder, disc electrode, ball electrode and sponges			Needs adaptor cable 017-0-0064
017-0-0064	Adaptor cable	To connect electrodes with 4 mm connector to HiToP 2 mm system		

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# Accessories **Duodynator**®

Part-No.	Specification	Use	Application	Remarks
45-38-773 EH725	DUO-electrode pair, standard			
45-38-781 EH725	DUO-electrode pair, small			
45-38-310 EH725	Standard accessory kit DUODYNATOR			Electrode set, 10 pockets, 2 rubber straps small 135 cm, 2 rubber straps large 135 cm, 4 fixing buttons
45-38-799 EH725	Electrode pocket, standard for DUO- electrode, (10 pcs.)			Moisten well
45-38-807 EH725	Electrode pocket, small for DUO- electrode, (10 pcs.)			Moisten well
026-0-3000	UNICAR <sup>®</sup> Device cart Basic rack			
026-0-3030	Additional parts for Duodynator Consists of - Device holder - Electrode holder			

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# Accessories **Neoserv**®

Part-No.	Specification	Use	Application	Remarks
014-0-0050	Suction hose red for Neoserv	Connects unit with suction electrode		Only in connection with suction electrode 60 mm or 90 mm 014-0-0083 014-0-0084
014-0-0053	Suction hose blue for Neoserv	Connects unit with suction electrode		Only in connection with suction electrode 60 mm or 90 mm 014-0-0083 014-0-0084
032-0-2110	Standard accessory set Neoserv			Consists of: 2 x suction hose red, 2 x suction hose blue, 4 electrodes 60 mm, 4 sponges
014-0-0026	Short circuit hose for NEOSERV	For use of 1 circuit only, seals the unused channel		
014-0-0014	Connection cable Red with 2 mm plug for use of NEOSERV with SONOSTAT	For combination therapy, replaces the 2 <sup>nd</sup> suction hose		

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# Accessories **Neoserv**®

Part-No.	Specification	Use	Application	Remarks
014-0-0083	Suction electrode, diameter 60 mm with horizontal connection			
014-0-0086	Electrode sponge diameter 60 mm (4 pieces) for suction electrode 014-0-0083			
014-0-0084	Suction electrode, diameter 90 mm with horizontal connection			
014-0-0087	Electrode sponge diameter 90 mm (4 pieces) for suction electrode 014-0-0084			

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