

Distribution

Direx distributes its products in over 70 countries worldwide.

Direct sales offices are listed below.

For contact details of distributors in other

countries, please contact:

info@direxgroup.com

United States

USA -

Direx Systems Corp.

Canton, MA

Tel: +1 339 502 6013

Toll Free: 888 824 7837

Fax: +1 339 502 6018

E-Mail: marketing@direxusa.com

Latin America

Argentina -

Direx Argentina

Buenos Aires

Tel: +54 11 5278 5964

Fax: +54 11 4032 0171

E-Mail: info@direx-argentina.com.ar

Brazil -

Direx Do Brasil Ltda.

Rua Alegre, 437 - B. Barcelona

São Caetano do Sul - SP

Tel: +55 11 4223-5070

E-Mail: direx@direxdoBrasil.com.br

Mexico -

Direx De Mexico

Mexico City

Tel: +52 55 5519 7467

Fax: +52 55 5519 7102

E-Mail: dgm@direxdemexico.com.mx

Europe

European Headquarters -

Direx Systems GmbH

Wiesbaden, Germany

Tel: +49 180 215 2152

Fax: +49 180 215 1151

E-mail: europe@direxgroup.com

Asia

Japan -

Direx Japan K.K.

Tokyo

Tel: +81 3 5807 3111

Fax: +81 3 5807 3112

E-Mail: contact@direxjp.co.jp

China

Service Center

Tel: +86 1350 1253 413

E-mail: direx@163.com

India

Direx Systems Ltd.

Chennai

Tel: +91 44 426 12703/4

Fax: +91 44 426 12705

E-Mail: direx@vsnl.com

Korea -

Direx Korea Co. Ltd.

Seoul

Tel: +82 2 565 4793

(4794, 4795)

Fax: +82-2-565-4743

E-Mail: bk1231@direxkorea.com

TECHNOLOGY FOR UROLOGY and more

Dedicated to providing physicians
worldwide with innovative high-
technology devices.

Direx marks nearly 30 years of high
technology innovation during which
we have offered advanced and unique
therapeutic technologies in urology.
Since the groundbreaking introduction
in 1986, of the world's first modular
and compact SWL system, further
innovations have been introduced to the
market including:

- Linear Shockwave Therapy for Erectile Dysfunction
- Low Intensity Shockwave Therapy for Diabetic Foot Ulcer
- Dual-head shockwave lithotripsy
- Stationary patient SWL with Integra, incorporating In-line and On-line fluoroscopy

To date, thousands of such devices
have been installed in over 70 countries
worldwide. These units are supported
by trained and experienced service
professionals.

RENOVA

Restoring Confidence

Erectile Function Renovation

DiREX
DIREXGROUP

www.direxgroup.com

RENOVA

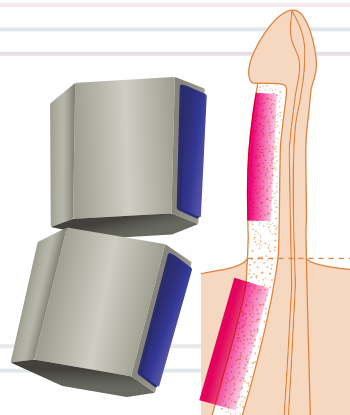
01-RNVA-012 Rev. 1

DiREX
DIREXGROUP



→ Erectile Function Renovation

Low intensity shockwaves have been shown to induce revascularization and treat a variety of soft-tissue conditions. Recent demonstration of erectile dysfunction (ED) treatment expands the applicability to vascular ED treatment and improvement of penile hemodynamics.



ED treatment geometry requires a dedicated device and associated protocols for matching the associated clinical and operational needs.

Renova uniquely meets the challenging requirements of:

- Linear waves focusing for efficient penile coverage
- improved crura coupling by transperineal attachment
- high frequency and quantity of shockwaves

Historical progression of sample applications:

2000	Gutherson et al. (Germany): in vitro revascularization (ref. 1)
2004	Nishida et al (Japan): clinical cardiac revascularization. (ref. 2)
2011	Wang et al (Taiwan): clinical wound healing. (ref. 3)
2010-2012	Vardi et al (Israel): clinical ED application (ref. 4)
2013	DirexGroup: dedicated second generation ED device (Renova)



1. Gutersohn A, Caspari G. Shock waves upregulate vascular endothelial growth factor m-RNA in human umbilical vascular endothelial cells. Circulation. 2000 Vol. 102 No.18.
2. Nishida T., et at., Extracorporeal Cardiac Shock Wave Therapy Markedly Ameliorates Ischemia-Induced Myocardial Dysfunction in Pigs in Vivo . (Circulation. 2004;110:2977.)
3. Wang C. et. al, Treatment of diabetic foot ulcers: A comparative study of extracorporeal shockwave therapy and hyperbaric oxygen therapy, Diab Res Clin Pract. 2011, doi; 10.1016/j.diabres. 2011.01.019
4. Vardi Y, et al. "Does Low Intensity Extracorporeal Shock Wave Therapy Have a Physiological Effect on Erectile Function? Short-Term Results of a Randomized, Double-Blind, Sham Controlled Study". THE JOURNAL OF UROLOGY, 2012, Vol. 187, 1769-1775.

Renova's innovative features: technology, application, protocol and utilization

→ Technology

Shockwaves production:	electromagnetic technology - higher precision, stability, controllability and frequency.
Pulse rate:	up to 600 shockwaves per minute
Shockwave focus:	linear segment for matching the application geometry.

→ Application

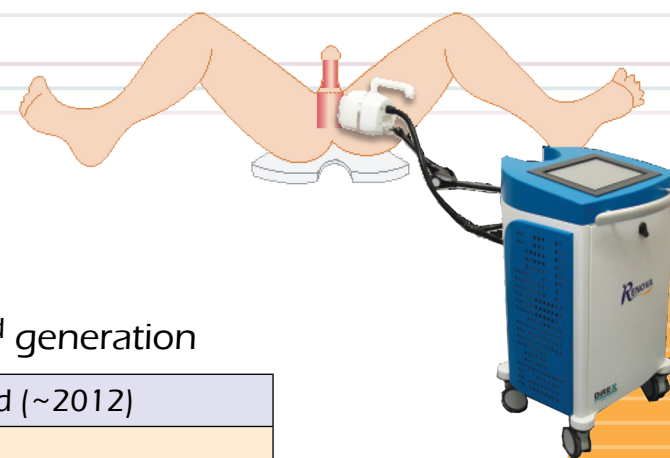
Experience:	design and protocol represent diverse research.
Corpus cavernosum coverage:	complete, by linear focusing.
Penile shaft:	separate application to each side
Crura:	perineal attachment for efficient shockwaves coupling to crura.
Preference:	more shockwaves to crura than to shaft.

→ Utilization

Penis holding:	self-supported penis scaffold.
Transducer holding:	articulated arm.
Treatment:	few sessions, high pulse rate, short treatment time.

→ Internet

Optional connection:	training, reporting, service and communications
----------------------	---



Comparing respective devices of 1st and 2nd generation

Device generation	1st (~2010)	2nd (~2012)
Technology		
Shockwave method	Electrohydraulic	Electromagnetic
Shockwave focus	Pointy	Linear
Shockwaves frequency	up to 120/minute	up to 600/minute
Application		
Organ coverage	discrete points	Linear segments
Crus coverage	1 point	linear segment
Coupling to crura	Via lower abdomen	Via perineum
Majority of shocks to:	Shaft	Crura
Utilization		
Penis Holding	Physician	Mechanical scaffold
Transducer Holding	Physician	Articulated Arm
Number of sessions	9	4
Shockwaves per session	1500	5000
Shockwaves duration	Down to 12.5 minutes	Down to 8.33 minutes
Internet		Optional

