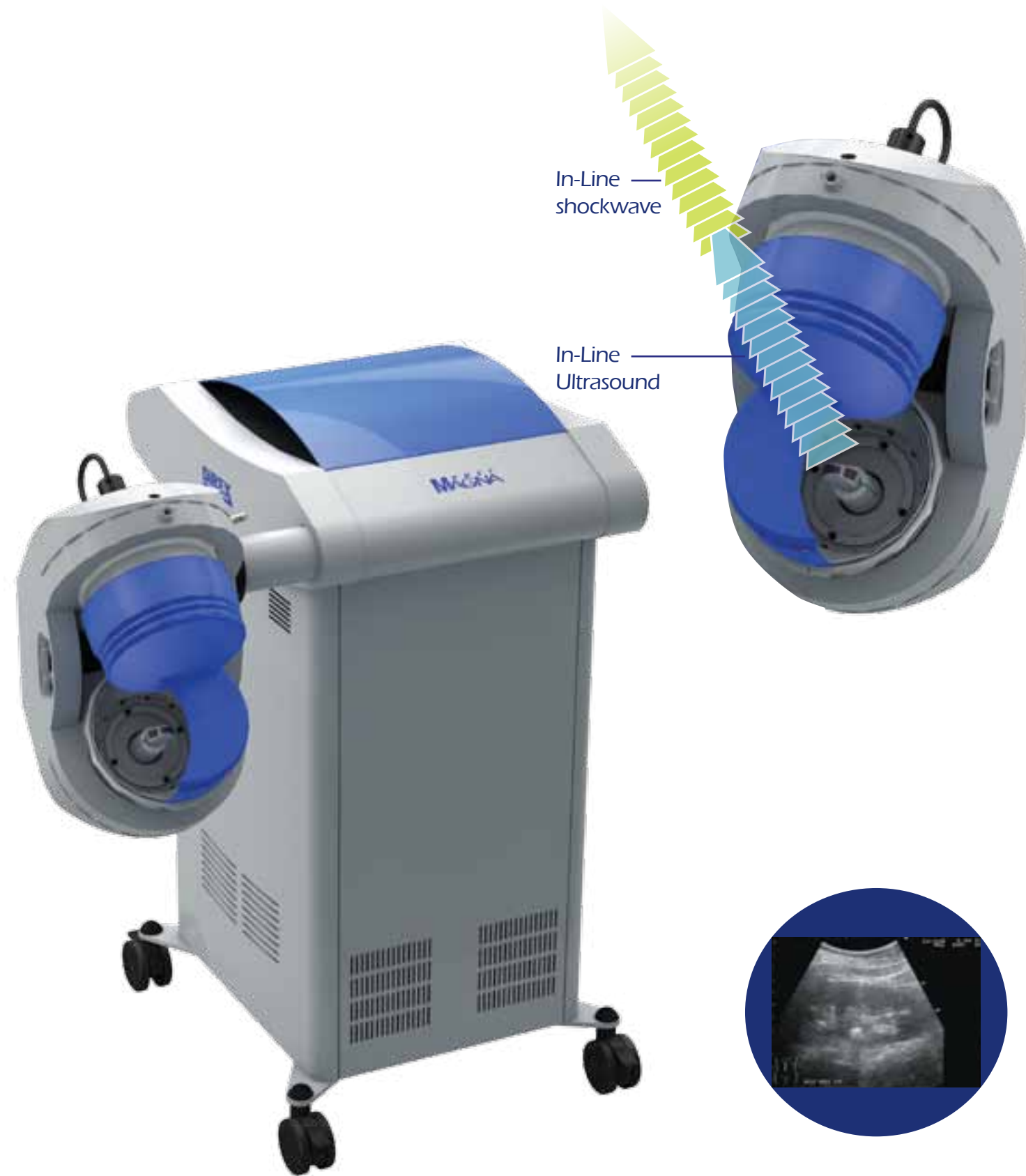


## “In-Line/On-Line” Ultrasound



Ideally, ultrasound localization should be applied by presenting an image that coincides with the shockwave delivery path. Magna's special design allows in-line ultrasound image acquisition without stopping the treatment session.

On-line imaging allows continuous monitoring and control of the stone fragmentation process without stopping the treatment. Ultrasound and X-ray imaging can be operated and viewed simultaneously with the dedicated Duet Magna image processing software.

## 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

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## 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
- Transurethral RF bipolar treatment for BPH and prostate disease
- Stationary patient SWL with Integra, incorporating In-line and On-line fluoroscopy
- Holmium lasers for lithotripsy with "Fibrex" optical fiber

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

# Dual Shockwave Lithotripsy



magna/1014/esbf

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# Electromagnetic DSWL Double Shockwave Lithotripsy

Dual Magna introduces the combination of electromagnetic technology and the double shockwave concept allowing for some clear and unique advantages in the field of shockwave lithotripsy.



## Reducing Kidney Damage

An Indiana University study on Double Shockwave Lithotripsy (performed on the Duet Magna's predecessor device) showed a 5-fold reduction in kidney damage\*. "The lesion produced by 2400 SWs (1200 SWs/head, power level 10) at 120 SWs/min in alternating mode was quite low (0.22 ±0.09% FRV) and compares favorably with the lesion (1.08 ±0.38% FRV) produced by 2400 SWs delivered with the HM3 Lithotripter at 120 SWs/min (24 kV)..." \*Handa et al. Journal of Urology, February 2009

# The Butterfly Focal Area

The Duet Magna is equipped with two reflectors and performs Double Shockwave Lithotripsy (DSWL) from these two sources.

DSWL results in the formation of a unique Butterfly Focal Area that concentrates pressure to the stone from two different angles, and spreads the "head and tail" of the shockwave volume to reduce the risk of kidney damage. In fact, the Duet Magna roughly converts the focal volume to a sphere, which is considered the ideal focal volume for lithotripsy. The Butterfly Focal Area is superior to the conventional ellipsoid, or "cigar", that only utilizes the central section of the focal area. This renders the "head and tail" of the focal area useless in terms of stone disintegration and only contributes to kidney damage.



## Distribute the Energy to Reduce Renal Damage

The Duet Magna, like its predecessor, the electro-hydraulic Duet, causes significantly less kidney damage than treatments with a single reflector. The clear advantage of Double Shockwave Lithotripsy lies in the fact that the total number of shocks is divided between two areas of the kidney so that only half of the shocks propagated towards the stone pass through the lower part of the kidney, while the other half pass through the upper part.

# C-arm Options

A variety of fluoroscopy units can be used with the Magna for stone localization, 3DScope dedicated systems or general purpose C-arms.

C-arms from a variety of manufacturers can easily be coupled to the Duet Magna, and can be used for lithotripsy as well as for traditional urological procedures.

Direx offers 3DScope Premium, a dedicated, motorized, remote controlled unit, with high quality digital imaging.

- Mechanically built with required height and length to match the focal point of Magna, it interconnects mechanically as a single unit.
- Motorized rotation movement for fast and precise localization.
- Remote controlled from Magna console, thus allowing treatments with minimal possible radiation to the operators.
- Foldable arm leading to easy transportation for mobile systems.



High frequency, Rotating anode, Up to 20 Rad/min

Double screen



## Urological Procedure Options

The treatment table enables comfortable Shockwave lithotripsy treatment as well as other urological procedures. The table is electrically operated on three axes plus the Trendelenburg movement.