

# ALPHA ULTRA LITH HIGH FRAGMENTATION ESWL Lithotripter

With X-Ray C-arm and Ultrasound Locating System  
& HIGH FRAGMENTATION SHOCK-HEAD

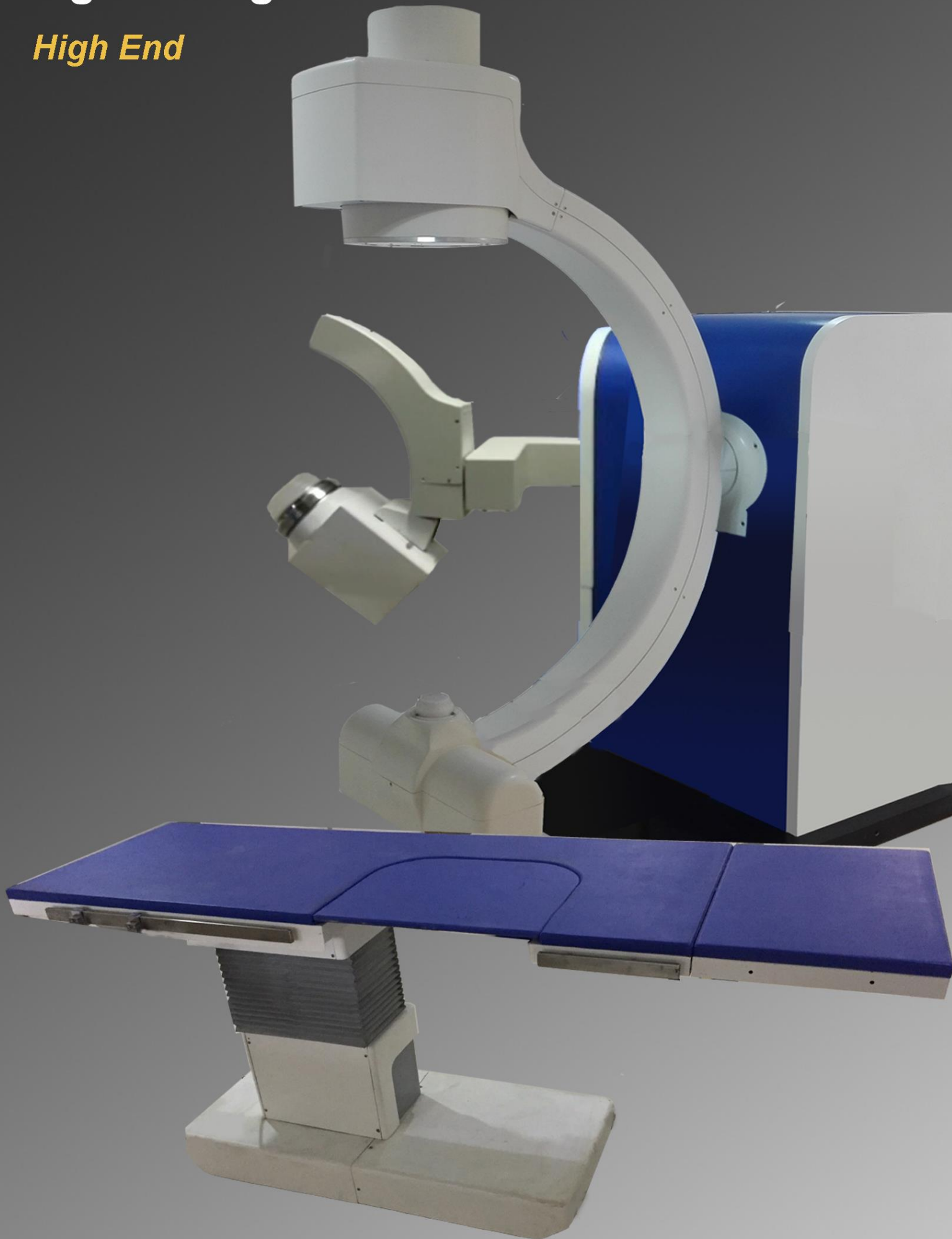


***Power, accuracy,  
Latest technology, safety...  
... at your fingertip***

**with Exclusive “High Fragmentation Shock Head”**

# ALPHA High Configuration ESWL

*High End*



The years of experience accumulated in manufacturing ESWL (Extra Corporeal Shock Wave Lithotripters) coupled with Research & Development together with our parameters, led us to produce the highest success rate / highest stone free rate ESWL lithotripter in the world. (98% stone free rate ) - while protecting the Kidney.

**98 %**  
**Stone Free Rate**

**While**  
**protecting the Kidney**

**Highest success rate  
and highest stone free rate  
ESWL lithotripter**

## SUPERIOR TECHNOLOGY

The ALPHA ULTRA - LITH is Forth Generation ESWL Lithotripter, using the latest Electromagnetic Technology, and High Fragmentation Shock-Head technology to create a very efficient system for lithotripsy. The Main Unit is a fully integrated system with Integrated therapy table & Ultrasound probe arm system.

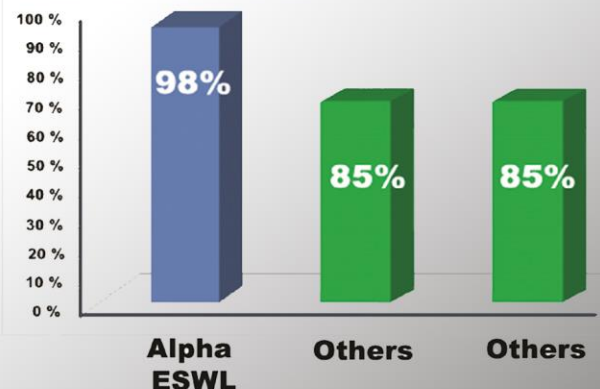


## STONE FREE RATE OF 98% (in one sitting) THE FINEST AND SAFEST FRAGMENTATION

The attributes to look for in modern shockwave technology are not only the ability to fragment stones, but more critically, the ability to do so in a single sitting without the patient returning for re-treatment and also to avoid Kidney Damage.

The unique High Fragmentation Shock Head utilized in the ALPHA ULTRA - LITH Lithotripter is endowed with just the right combination of high pressure and focal size to pulverize stones efficiently and safely into fragments small enough to be eliminated naturally.

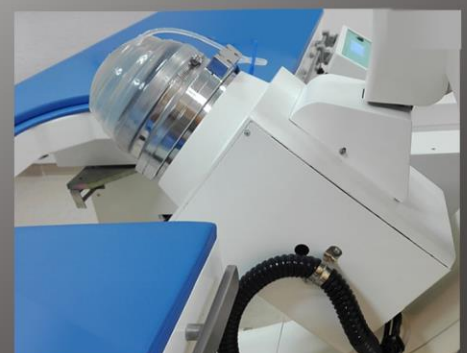
### Stone Free Rate



## HIGH FRAGMENTATION - SHOCK HEAD

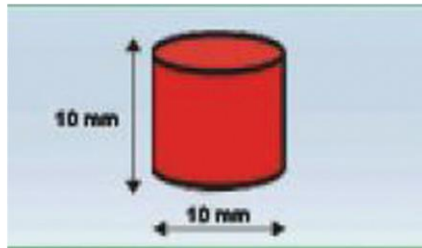
The secret of Alpha-ESWL Lithotripters is its Exclusive High Fragmentation shock Head that delivers efficient, consistent & reliable energy. The High Fragmentation Shock Head ensures unsurpassed stone free rate of 98% (in one sitting) - while protecting the Kidney at all times.

The Exclusive EM Protective Shield placed inside the Shock Head protects the Kidney and patient from EM Radiation while breaking the Kidney Stone successfully. Only Alpha ESWL provides this protection to the patient.



## EVIDENCE OF FINER FRAGMENTATION - Achieved with fewer shocks.

The comparison below shows the residual fragments after the in-vitro fragmentation of a Test Stone (left) using the Alpha High Fragmentation Shock Head.



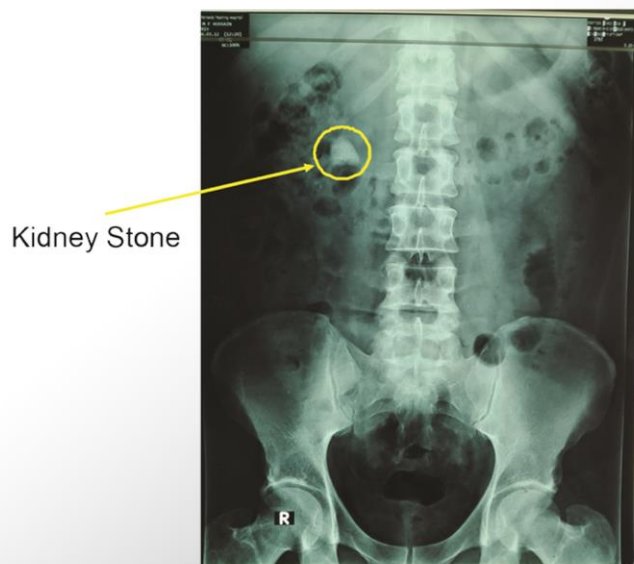
Sample Stone



Residual fragments of a hard brick stone after shockwaves with the High Fragmentation Shock Head (only 738 shocks)

## X-Ray Image Before and After

Other ESWL machines can break Kidney stones only up to 800 HU value Density.  
Alpha ESWL can break stones over 1000 HU value Density.



Kidney Stone

Before

X-ray Image of Male / 41 Years  
Right Kidney Stone with a  
1068 HU value Density in the CT Scan



After Alpha ESWL

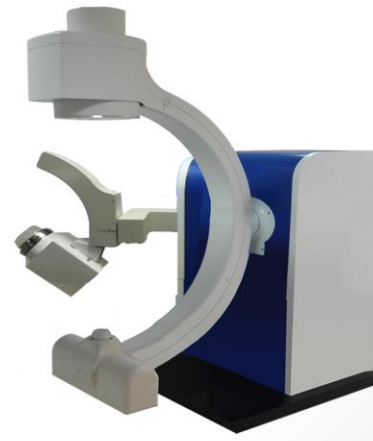
X-ray image after 3 months  
shows right Kidney completely free  
of Kidney Stone

## PRECISE ALIGNMENT

The risk of miss-alignment is avoided with the fully integrated shock source and C-arm, making set-up fast and reliable.

The Isocentric movements of the therapy head and X-ray imaging C-arm, ensures precise stone localization.

The ALPHA ULTRA-LITH ESWL system's isocentric design allows both the shockwave and the imaging systems (X-ray system & Ultrasound system) to revolve around a single point.



## X-RAY SYSTEM

The X-Ray system is equipped with High Frequency Image Intensifier, and uses Digital imaging CCD technology ( One Million Pixels) to produce High quality images on a High Definition flat panel Monitor. Exact positioning is obtained through the integrated isocentric shock head and X-ray system.

The C-arm moves along left and right projections, while the central X-ray beam continues to pass through the center of the focal zone at all times. Setup is fast and reliable.



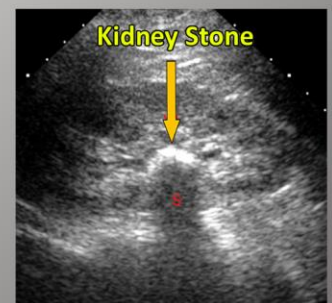
## MOTORIZED ULTRASOUND PROBE ARM SYSTEM

The Motorized Ultrasound probe arm is designed to house the ultrasound probe firmly, and zooms in and out for best visualization. The probe arm rotates around the shock head to facilitate the best angle allowing visualization of stones from various positions and ensures precise stone localization.

This design allows both the shockwave and Ultrasound wave to revolve around a single point. This ensures precise alignment of the targeting system and the shockwave focus at all times.



Ultrasound Image



## ULTRASOUND LOCALIZATION SYSTEM

- Also able to localize and break calculi by Ultrasound.
- Integrated Ultrasound Probe Arm provided
- Ultrasound localization probe arm is fixed to the Shock head and rotates freely around the Shock Head.

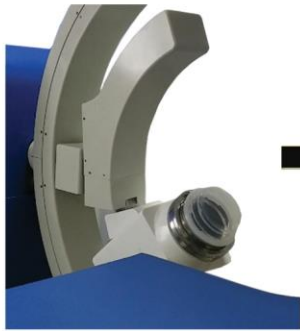
## MULTIFUNCTIONAL TABLE

- The treatment table can be use for Urology Procedures.
- Leg holders are provided for urology procedures. ( Optional )
- The treatment table is a Multifunctional therapy table
- Six directional movement of Urology Table ( up-Down / Left-Right / Inward-outward )
- All movements are motorized.

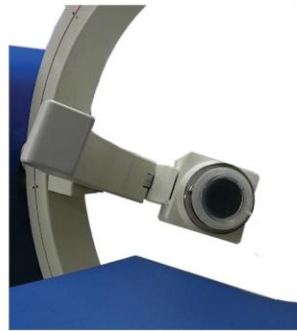


## Shock Head Movments

The ALPHA ULTRA-LITH Lithotripter Shock head can be moved under table and over table to treat patients from Up table / Down table / Side Table positions. Further the shock head slides along the axis (Orbital Movement) in all these positions, so the patients can be treated in several Up-Table / Down-table / and Side table positions. No shock head obstruction. Allows plenty of room to bring the patient and stone up to the focal point easily.



**Under Table Position**  
( With Orbital Movement )



**Side Position**  
( With Orbital Movement )



**Over Table Position**  
( With Orbital Movement )

## Testimonials of our customers

**Dr. A. Pethiyagoda**  
**Specialist Urologist ( MS, FRCS (Edin).**

I am impressed to see that the Alpha ESWL Lithotripter shows a very high success rate and stone free rate in our patients in one sitting. This is a very high success rate compared to other ESWL lithotripters in the market.



**P.U. Fernando ( ESWL Operator )**  
**(Colombo National Hospital ESWL Department)**

I have many years of experience performing ESWL, and up to now I have performed more than 15,000 ESWL procedures. I work both with Alpha ESWL machine and a German ESWL machine. Our observation is - the Alpha ESWL has a far better stone breaking ability than the other German ESWL we work with. I have successfully broken Kidney and upper ureter stones with the Alpha ESWL machine, that the German ESWL Machine could not break. Xray images and patient clinical reports are available on this respect.



**R.H. Ranasinghe ( ESWL Operator )**  
**(Kandy Hospital ESWL Department )**

I work with the Alpha ESWL lithotripter and also with an expensive German Lithotripter. My observation is that the Alpha ESWL lithotripter has shown 98% success rate and stone free rate in our patients ( in one sitting). This I observed is far greater than the other ESWL machines that I work with which has about 85% success rate and stone free rate.

## **Main Unit**

- Fully integrated ESWL with Integrated C-arm Xray & Ultrasound system.

## **Electro Magnetic Technology**

- Electromagnetic Shock Wave Lithotripter System

## **Digital Computerized X-Ray System**

- High Frequency X-ray system
- High Voltage Generator
- C-arm with Image Intensifier
- 1 million pixels CCD Camera

## **Image Work Station**

- Provides Computerized Digital X-ray images
- Computer System Provided
- High Resolution X-ray Monitor
- Able to display Digital X-ray Negative & Positive images side by side.
- Able to control contrast and manipulate the Digital X-ray images.  
(To provide the best and clearest X-ray image visualization of the Kidney stone )
- Generate & Print Reports
- Store / Archive X-ray images & Reports to Hard Drive, DVD, USB.

## **Ultrasound Localization System**

- Also able to localize and break calculi by Ultrasound.
- Integrated Ultrasound Probe Arm provided
- Ultrasound localization probe arm is fixed to the Shock head and rotates freely around the Shock Head.

## **Shock- Head**

- High Fragmentation Shock - Head
- The Shock Head moves freely up Table and down Table along the integrated C-arm in spherical motion around the focus area.

## **Multifunctional Treatment Table**

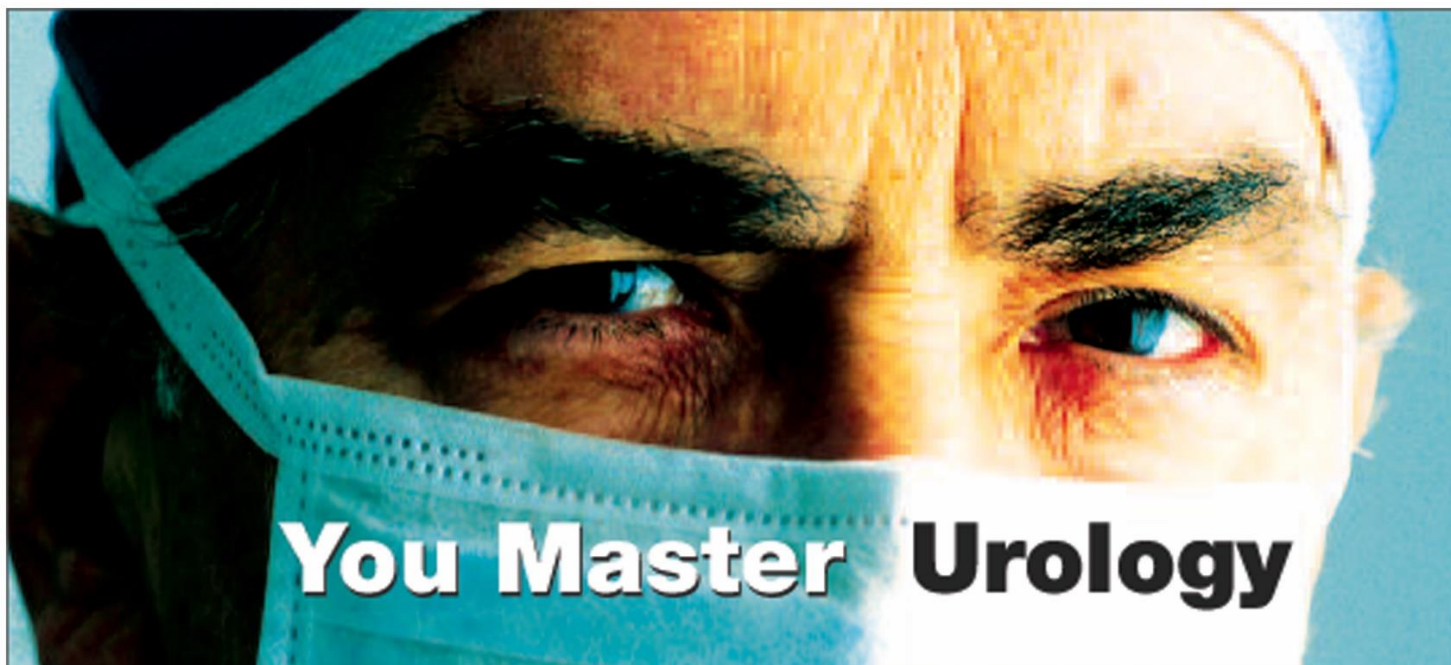
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- Leg holders are provided for urology procedures. ( Optional )
- The treatment table is a Multifunctional therapy table
- Six directional movement of Urology Table ( up-Down / Left-Right / Inward-outward )
- All movements are motorized.

## **Reports**

- Able to generate patient reports, which consists of before and after treatment X-ray images, and all other patient data and treatment data.
- Report can be printed on a Report sheet. ( Printer provided )

## **Storing Reports**

- Able to store the Xray images in the Hard disk, and also copy them to DVD / CD / USB.



**We Master**

**ESWL**

**Contact us for a quotation or Demonstration**

**Alpha Medi Technologies**

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