

## Ultrasound Accelerated Thrombolysis

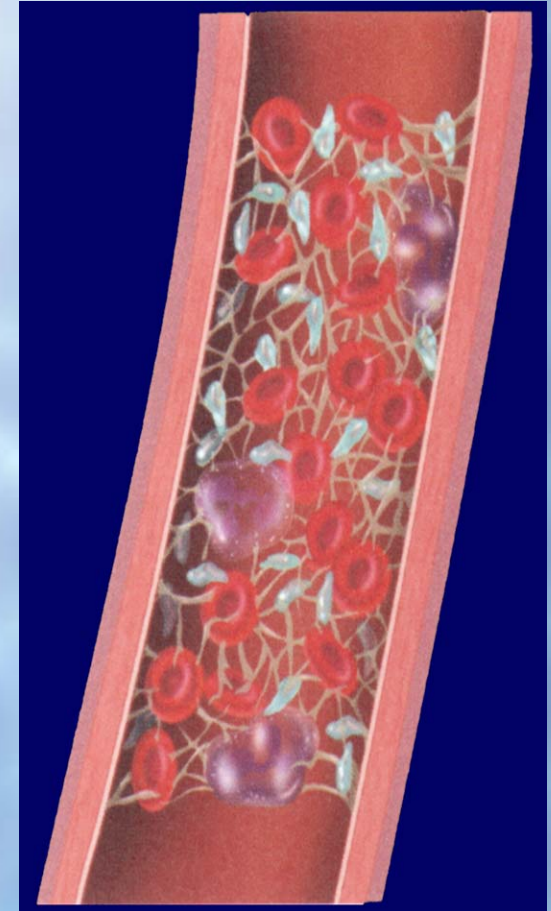


## What it does

Simultaneously delivers low energy, high frequency (2.2 Mhz) ultrasound and drug along the entire treatment zone of the infusion catheter (6-50cm.) Time to clot lysis is dramatically reduced.

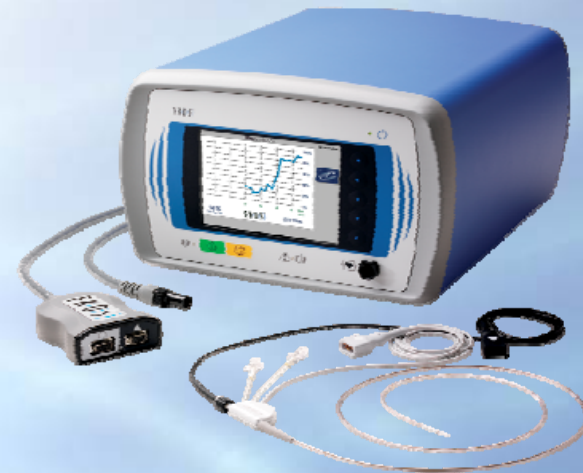
## How it works

- Reversibly changes fibrin structure
  - Unwinds fibrin strands
- Enhances transport into fibrin bundles
  - Ultrasound creates a pressure wave that drives drug into the permeable clot
  - Constant infusion of fresh drug
- Enhanced clot **dissolution**, not disruption



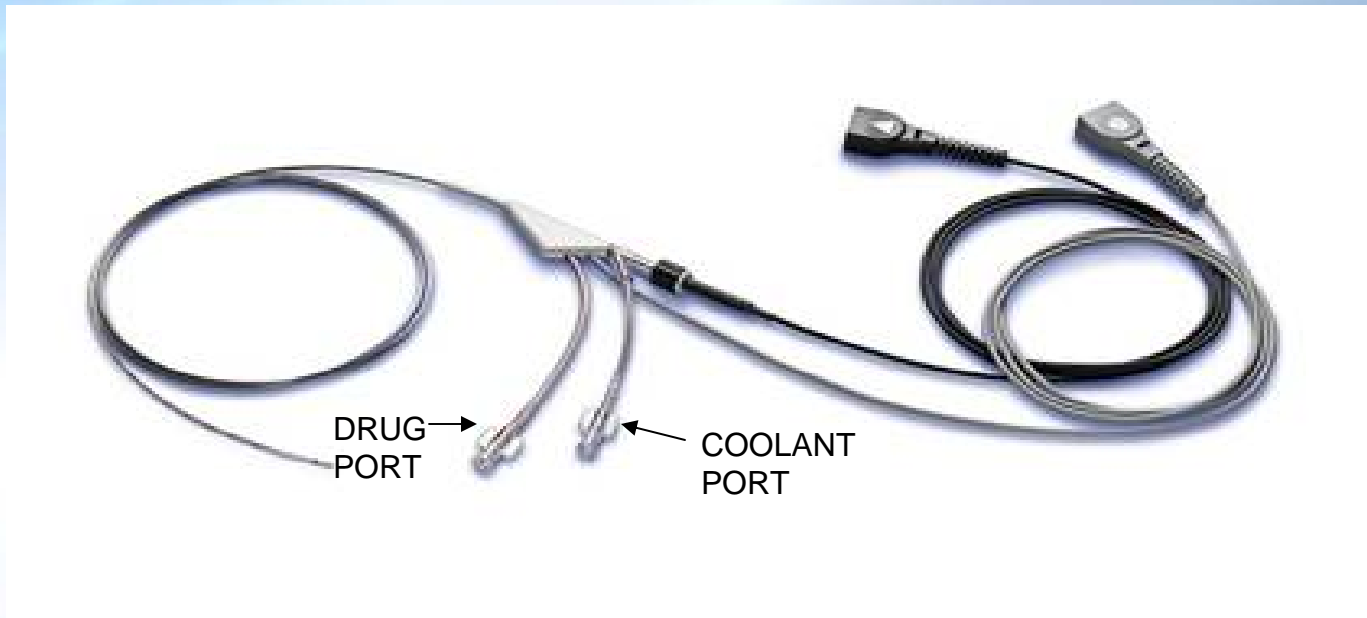
## Components

- EkoSonic Control Unit
- Catheter Interface Cable



## Features

- Controls and monitors power output and temperature of the ultrasound transducers
  - Auto-regulates power to maximize ultrasound benefit while maintaining a safe temperature
- Monitors connection integrity and operating parameters
- Displays average power output which may indicate a change in blood flow



## Components

- Intelligent Drug Delivery Catheter
- MicroSonic Device

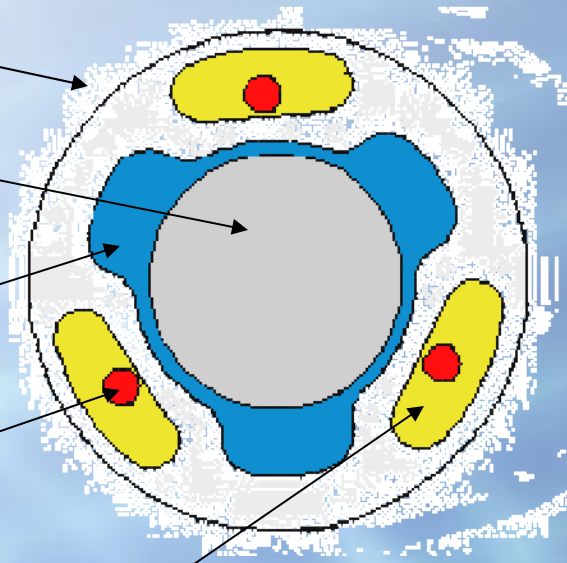
## Drug (Lytic) and Coolant Ports

Use your hospital infusion pump to:

- Infuse lytic through the drug port
- Infuse Heparinized Saline or Normal Saline through the Coolant port

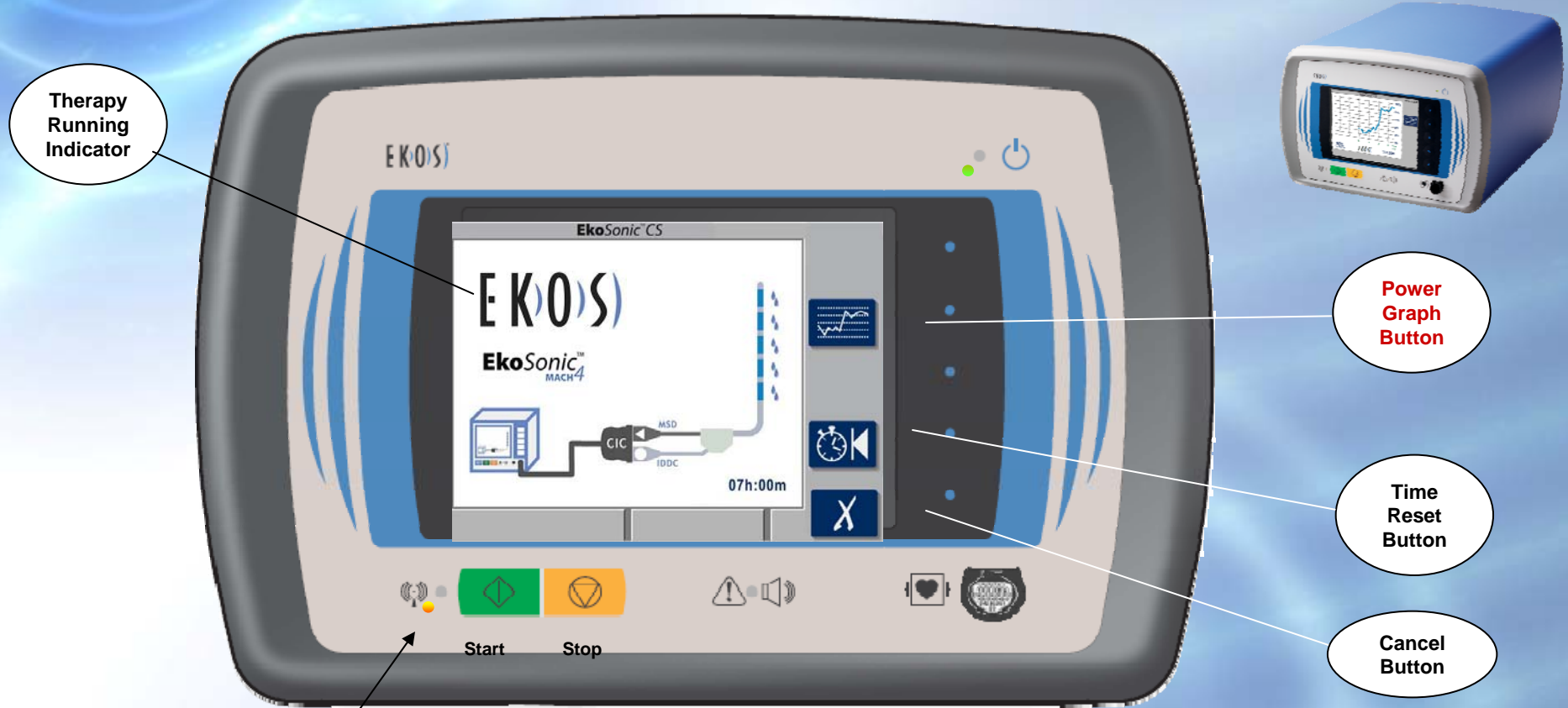


- Fits through a 6F sheath
- Central lumen accommodates a 0.035 in. guidewire and, later, the microsonic device
- Coolant flows through central lumen and out the distal end hole
- Thermocouples monitor temperature
- Drug flows through drug lumen and out the side holes



Cross Section

- NEVER DRAW FROM OR INJECT ANYTHING INTO THE DRUG PORT. THIS IS FOR THROMBOLYTICS ONLY!
- NEVER INFUSE ANYTHING THROUGH THE COOLANT PORT EXCEPT HEPARINIZED OR NORMAL SALINE!
- Due to the microscopic holes in the drug delivery catheter:  
Maximum flow through Drug Lumen is 35cc/hr
  - Please adjust your drug concentrations accordingly
- In order to insure optimum temperature monitoring of the ultrasound transducers:  
Minimum flow through the Coolant Lumen is 35cc/hr.  
Maximum is 120 cc/hr
- Coolant should be heparinized Normal Saline or Normal Saline at room temperature and exits at the DISTAL end hole of the catheter.



Yellow Light Flashing  
Indicates Ultrasound is ON

### Intuitive Interface

### CHART TOTAL AVERAGE POWER EVERY HOUR



## Intuitive Interface

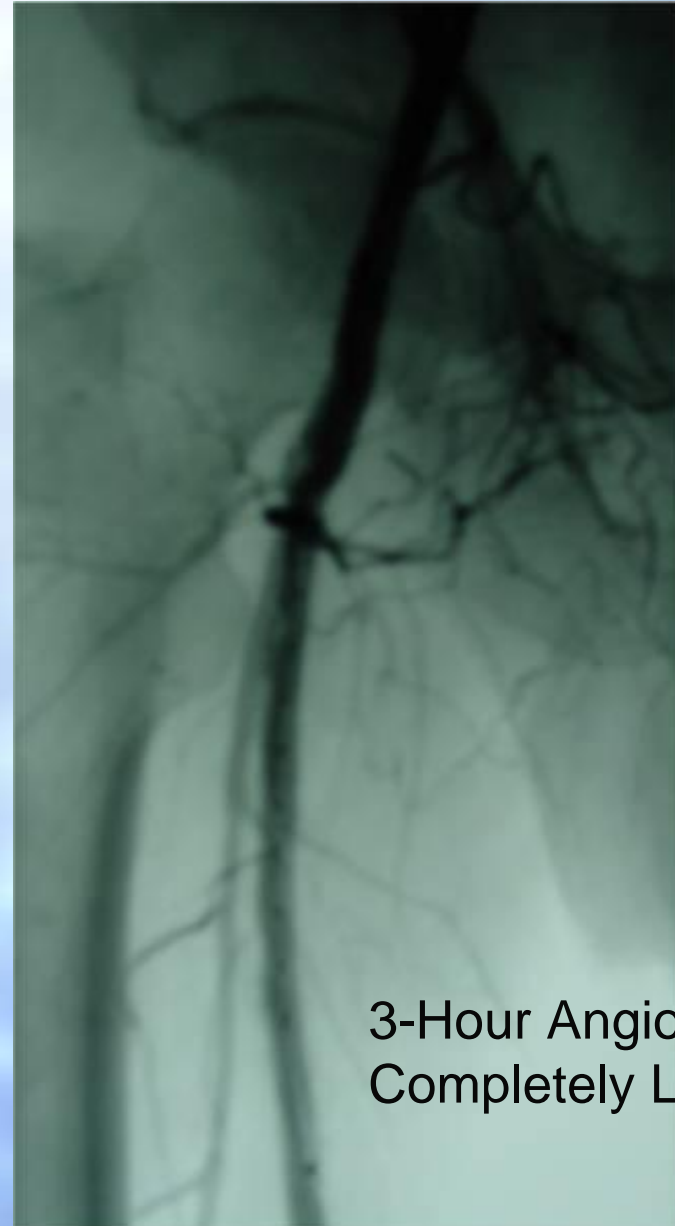
## Pearls of Wisdom

- Ultrasound turns off **AUTOMATICALLY** with any alarm condition and must be **MANUALLY RESTARTED**
- Troubleshooting **ICONS** appear at the bottom of the screen.
- Battery is good for 1 hour. Please keep plugged in during use and storage. (takes 4 hours to charge if it runs out)

## EkoSonic<sup>®</sup> MACH4e<sup>™</sup>

- **View Troubleshooting ICONS** on the bottom of the screen.
- **Troubleshoot the Alarm** and press the **GREEN** start button.
- **Call Helpline** whenever needed. 24/7  
1 (888) 356-7435





**EKOS)**

**24 / 7 EKOS HELP**

**1 (888) 356-7435**