

**LAP-X Hybrid** is a unique laparoscopic simulator that combines the functionality of a virtual reality trainer with a box trainer. Users can train on virtual reality mode at different curriculum modules: basic, novice, intermediate, advance, and procedural modules like appendectomy, cholecystectomy, nephrectomy, etc.

The trainee can switch to box trainer mode easily at any time. As a box trainer, the LAP-X Hybrid has the possibilities of metrics measurement and performance recording and is compatible with all kinds of different box exercises available in the market.

# Benefits

- Portable, compact, and easy to set up
- Ideal for developing and improving laparoscopic skills
- Administration tool to monitor the training progress of trainees
- Real surgical instruments are used, narrowing the gap between training and actual surgery
- Combination of virtual reality and box trainer
- Unlimited user registration
- Instant feedback with measurement: duration, path lengths, mistakes
- Online remote assessment by instructors
- Database to register different users
- Trainees' performance can be recorded for later assessment
- Possibility to use animal organs for training
- 34 VR exercises divided into five curricula

# General

- Power supply from the computer's USB port
- Connection: USB 2.0 and 3.0

# System specification

- Two controllers of 1.6 kg each
- Controller Dimensions: 22x15x32cm (WxDxH) each
- HD camera, led light, foot pedals
- Exercise platform 35x30x5cm (Wx-DxH)

### Computer Requirements

- Processor Intel i7, 3.4GHz
- Memory >8 GB
- Video Card Nvidia® GeForce® GTX 650 or better



### Hand-on training

Handle real laparoscopic instruments to improve manual dexterity and laparoscopic depth perception.



#### Laparoscopic appendectomy

This module is designed to train laparoscopic appendix removal. Trainees can choose from multiple instruments, such as graspers, staplers, and a retrieval bag.



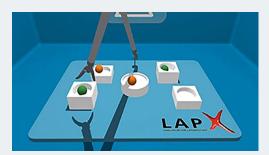
## Handy and user-friendly

Suitable for laparoscopic surgical training for medical students, surgical residents, and surgeons at all levels of experience.



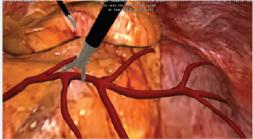
### Partial Nephrectomy

Intended to train a laparoscopic nephrectomy. This exercise allows clipping and cutting the renal vein, renal artery, and ureter.



#### Basic Skills

This module is designed for practicing primary controlling skills with laparoscopic instruments in a non-anatomical environment.



#### **Vessel Cauterization**

Designed for trainees to practice cauterization and cutting of vessels.