



**VALKYRIE
SIMULATORS**



The most time efficient ultrasound tissue Simulators on the market. Developed by opinion leaders and workshop instructors, Valkyrie Simulators are the most anatomically accurate, tissue-like tools to learn point-of-care ultrasound and certify skills acquisition before approaching patients.

**THE MOST ADVANCED
ULTRASOUND SIMULATORS**

UPPER EXTREMITY NERVE BLOCK SIMULATORS

Infraclavicular/PEC I & II/Parasternal Nerve Block Simulator

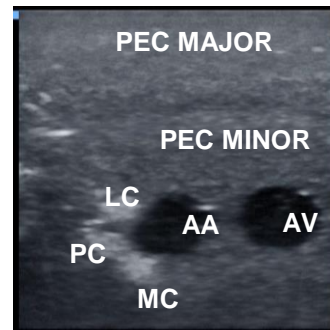
MS2-INF/PEC



Internal Anatomy: Pectoralis major and minor muscles; Serratus muscles; Axillary artery and vein; Chords of the brachial plexus; Clavicle; Coracoid process; Ribs 1-4; Pleura and Chest Cavity

External Landmarks: Clavicle; Deltopectoral groove; Pectoralis muscle; Chest wall; Shoulder; Deltoid muscle

Supported Blocks: Infraclavicular, PEC I and PEC II, Parasternal



Interscalene/Supraclavicular/Deep Cervical/ Stellate Ganglion Nerve Block Simulator

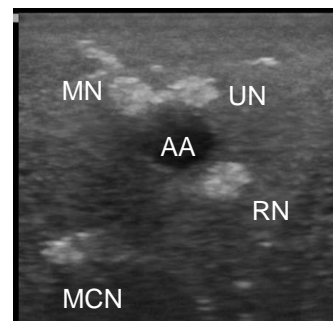
MS3-INT



Internal Anatomy: Anterior scalene muscle; Middle scalene muscle; Sternocleidomastoid muscle; Carotid artery; Internal jugular vein; Subclavian artery; Clavicle; C2-C7; First rib; Clavicle; Brachial plexus; Longicollis; Stellate Ganglion

External Landmarks: Sternocleidomastoid muscle; Clavicle; Lateral neck; Chest wall; Thyroid notch

Supported Blocks: Interscalene, Supraclavicular, Deep Cervical, Stellate Ganglion



Suprascapular

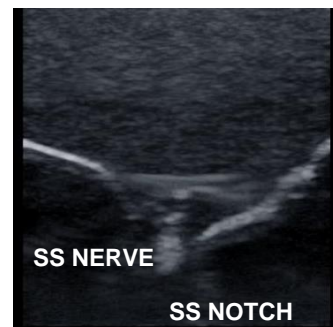
MS2-SSC



Internal Anatomy: Clavicle, scapula, humerus, suprascapular nerve, suprascapular artery, circumflex artery

External Landmark: Scapula and clavicle

Supported Blocks: Suprascapular



UPPER EXTREMITY NERVE BLOCK SIMULATORS (Cont.)

Axillary Brachial Plexus Simulator

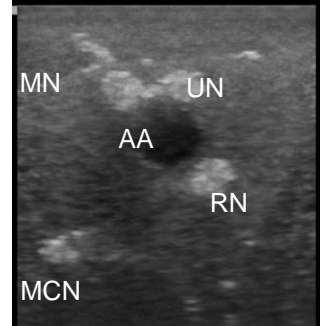
MS2-ABP



Internal Anatomy: Radial nerve; Ulnar nerve; Median nerve; Musculocutaneous nerves; Axillary artery; Axillary Vein; Deltoid muscle; Biceps muscle; Coracobrachialis muscle

External Landmark: Axillary fossa; Pectoralis muscle; Trapezius muscle; latissimus Biceps Brachialis muscle; Deltoid Muscle

Supported Blocks: Brachial Plexus



Wrist Block Simulator

MS2-MED



Internal Anatomy: Radius, ulnar carpal bones; Median and ulnar nerves; Radial Artery; Ulnar artery; Deep and superficial muscles of the forearm

External Landmark: Ulnar head; Radius; Ulna; Palmar crease; Tendons of wrist flexors; Thenar ligament; Veins; Hypothenar ligament

Supported Blocks: Radial, Medial, Ulnar



LOWER EXTREMITY NERVE BLOCK SIMULATORS

Transgluteal Sciatic Block Simulator

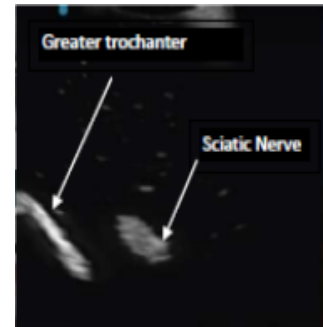
MS2-STG



Internal Anatomy: Great trochanter; Ischial tuberosity; Sciatic nerve; Gluteus maximus

External Landmark: Gluteus maximus; Gluteal crease; Greater Trochanter

Supported Blocks: Transgluteal Sciatic



LOWER EXTREMITY NERVE BLOCK SIMULATORS

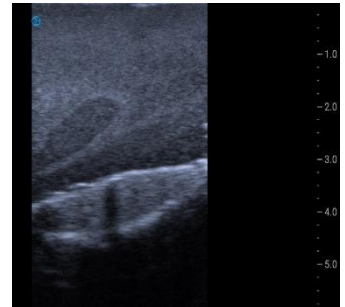
Piriformis Simulator

MS3-PIR



Landmarks: Iliacus, Sacrum, Femor, Piriformis, Gluteus maximus and Sciatic Nerve

Blocks Performed: Sacro iliac joint, Sacral Hiatus, Piriformis muscle, Sciatic Nerve



Femoral and Fascia Iliaca Simulator

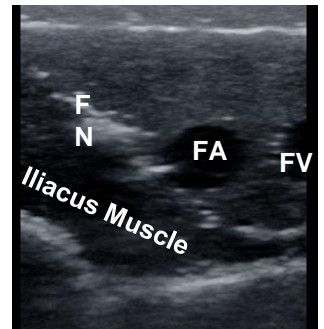
MS2-FEM



Internal landmarks: Femoral, lateral cutaneous nerve; Saphenous nerves; Facial ilica; Facia lata; Iliopsoas muscle; Pectineus muscle; Sartorius muscle; Adductor muscles; Femoral artery; Femoral vein

External landmarks: Inguinal crease; Anterior superior iliac spine; Proximal thigh; Hips Pubic tubercle; Femoral Crease

Supported Blocks: Femoral, PENG , Fascia Iliaca, Femoral Triangle



Popliteal and IPAC Nerve Block Simulator

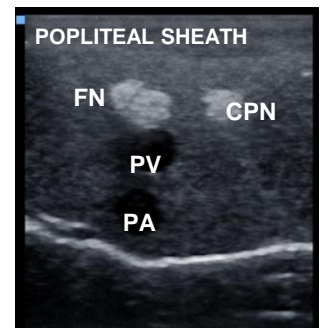
MS2-POP



Internal Anatomy: Popliteal artery and vein; Common peroneal nerve; Tibial nerve; Semitendinosus muscle; Semimembranosus muscle; Biceps femoris muscle; Distal part of femur

External Landmarks: Popliteal fossa; Tendon of Biceps Femoris Muscle; Tendon of Semimembranosus Muscle; Popliteal Fossa; Popliteal Crease; Popliteal triangle

Supported Blocks: Popliteal, IPACK



LOWER EXTREMITY NERVE BLOCK SIMULATORS (Cont.)

Adductor/Saphenous Combined Nerve Block Simulator

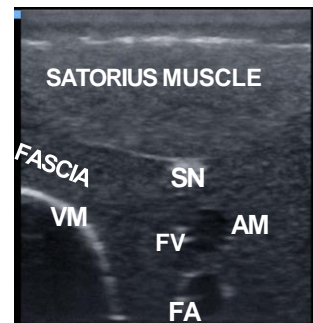
MS2-ADD



Internal Landmarks: Sartorius muscle; Vastus medialis muscle; Adductor canal; Femoral artery; Femoral vein; Saphenous nerve; Relevant fascial sheaths.

External Landmarks: Mid and distal thigh; Knee; Quadriceps Femoris muscle; Sartorius Muscle

Supported Blocks: Adductor Canal



Ankle Block Simulator

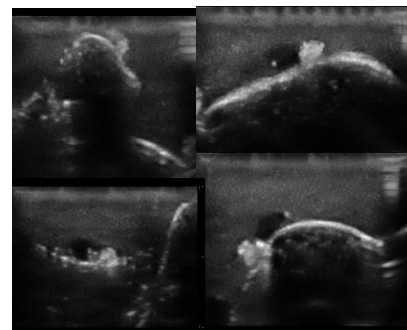
MS2-ANK



External Landmarks: Tibia; Lateral malleolus; Medial malleolus; Side of the foot; Dorsum of the foot.

Internal Anatomy: Tibial nerve; Peroneal nerves (superficial and deep); Sural nerve; Saphenous nerve; Posterior and anterior tibial artery and vein; Tibia Fibula; Medial malleolus

Supported Blocks: Peroneal, Tibial, Sural, Saphenous



TORSO

TAP and Quadratus Lumborum Simulator

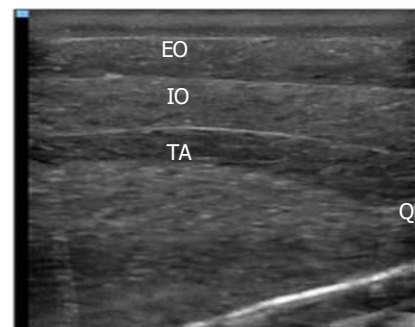
MS2-QUA



INTERNAL LANDMARKS: Transverse abdominis muscles; Internal and external oblique muscles; Quadratus lumborum muscles; Latissimus dorsi muscles

EXTERNAL LANDMARKS: Umbilicus; Rectus abdominus

SUPPORTED BLOCKS: Quadratus Lumborum, Transverse Abdominus (TAP)



TORSO (Cont.)

ILIO-Inguinal Simulator

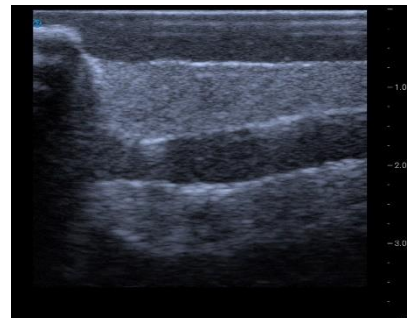
MS3-ILO



External Landmarks: Umbilicus, rectus abdominus

Internal Landmarks: External oblique, internal oblique, transverse abdominus, superior iliac spine

Blocks Supported: TAP, Ilio-inguinal, Rectus Abdominus



Paravertebral (PVT) and Erectores Spinae Simulator

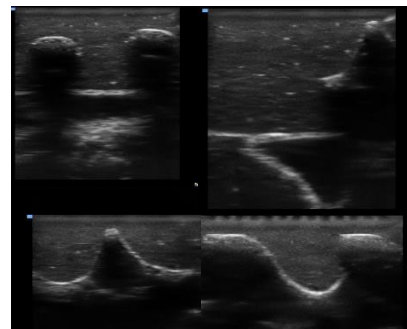
MS2-PVT



Internal Anatomy: T3-T7, Ribs 3-7, Paravertebral Space

External Landmark: Left and right inferior angle of scapula; Vertebra prominens; Spinous process

Supported Blocks: Paravertebral, Erector Spinae



Intercostal and Erector Spinae Simulator

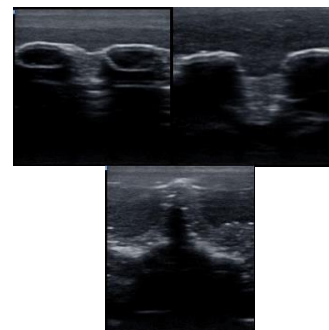
MS3-ITC



Internal Anatomy: T7-T10, Ribs 7-10. Intercostalis, Erector Spina, Latissimus Dorsi

External Landmark: Left and right inferior angle of scapula; Vertebra prominens; Spinous process

Supported Blocks: Intercostal, Erector Spinae



TORSO (Cont.)

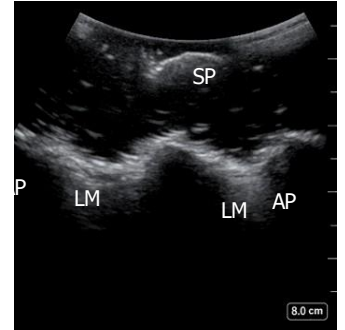
Epidural Simulator



INTERNAL LANDMARKS: L1-L5; Sacrum; Epidural space; Spinal processes; Laminae; Articulate joints; Intervertebral space; Dura and Ligamentum Flavum

EXTERNAL LANDMARKS: Iliac crest

SUPPORTED BLOCKS: Epidural, Erectus Spinae



ESSENTIAL SKILLS TRAINERS

MiniSim Essential Trainer



Allows needle-target practice in plane and out of plane and facilitates acquisition of essential skills of using ultrasound

Internal Landmarks: Artery, Vein, Nerve

External Landmarks: Not applicable

SUPPORTED BLOCKS: Fundamental needle skills



MiniSim Injection Trainer



INTERNAL LANDMARKS Nerve

EXTERNAL LANDMARKS: Not applicable

INJECTION CHARACTERISTICS

Tissue: <5 PSI for fluid flow to occur

Intraneural: >20 PSI for fluid flow to occur



MS2-EPI

MS2-TRNTC

MS3-TRN-I

ESSENTIAL SKILLS TRAINERS (Cont.)

MiniSim Injection Trainer

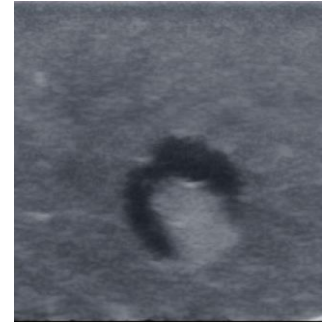


Designed to allow for the observation and understanding of the characteristics of Simple, Complicated, and Complex cysts.

Internal Landmarks: One each Simple, Complicated and Complex Cyst.

External Landmarks: Not applicable

Supported Blocks: Intraneural pressure injection



Custom Models

Lead time 4-6 weeks

Ocular Block Simulator



Facilitates training and skills acquisition for Ocular blocks.

Internal Anatomy: Optic Nerve, iris, cornea, lens, vitreous body, orbit.

External Landmarks: Eyelid, orbit.

Supported Blocks: Retrobulbar, Peribulbar, Sub Tenon (left and right eye)

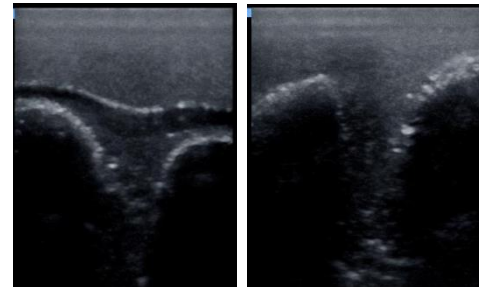


MiniSim Knee Trainer MSK/Pain Model



This custom knee model Facilitates training for knee joint injection.

Anatomy: Femur, Tibia, Fibula, Patella and Meniscus (MN).



MS3-CYST

MS3-OCC

MS3-MSKK

ULTRASOUND - eZSimulator

eZSimulator Kit without Laptop

EZ-ESL



The eZSimulator is a unique, PC-based training tool for ultrasound-guided procedures. It consists of a virtual transducer and software which projects a simulated needle onto the selected image in real time. Develops transducer and needle coordination skills in real time with a range of application scenarios. Using the eZSimulator will allow for the development of confidence in using both in-plane and out-of-plane needle techniques.

Includes a large image database and many tutorials.

The eZSimulator includes eZGuide® Needle Navigation (NGS) which shows, in real time the needle position, the projected needle path, and needle/probe alignment to help you understand how best to approach the target while keeping the needle in view. Build your experience with real time feedback as you perform a simulated procedure.

Included

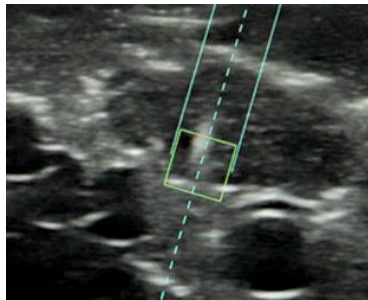
- Basic NGS Out-Of-Plane
- Basic NGS In-Plane

Upgrade Packages (Fee Required)

- CVC-Adult
- Interscalene Brachial Plexus Block
- Axillary Brachial Plexus Block
- Femoral Nerve Block
- Distal Sciatic Nerve Block

Available with or without compatible laptop.

Laptop requirements: Request by email at info@valkyrie-sales.com.



eZSimulator Kit without Laptop

EZ-ESLP



ULTRASOUND – eZSimulator (Cont.)

eZSimulator- Femoral



External Landmarks: Includes all external landmarks required for probe positioning.

Internal landmarks are provided by the eZSimulator software.

Develops hand eye coordination for needle placement using the eZSimulator software.

Simulator only. Does not include laptop or software.



eZSimulator Media

eZSimulator- Interscalene



External Landmarks: Includes all external landmarks required for probe positioning.

Internal landmarks are provided by the eZSimulator software.

Develops hand eye coordination for needle placement using the eZSimulator software.

Simulator only. Does not include laptop or software.



eZSimulator Media

eZSimulator- Central Venous Access

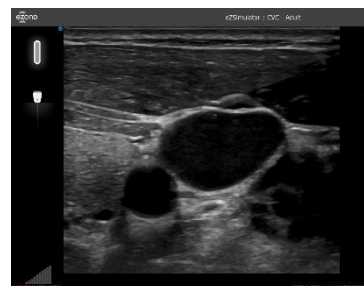


External Landmarks: Includes all external landmarks required for probe positioning.

Internal landmarks are provided by the eZSimulator software.

Develops hand eye coordination for needle placement using the eZSimulator software.

Simulator only. Does not include laptop or software.



eZSimulator Media

MSEZ-FEM

MSEZ-INT

MSEZ-CVC

ULTRASOUND – SE1

Handheld Ultrasound Probe with Needle Navigation Technology
(Probe Only)

EZ-SE1



Probe and Needle Alignment

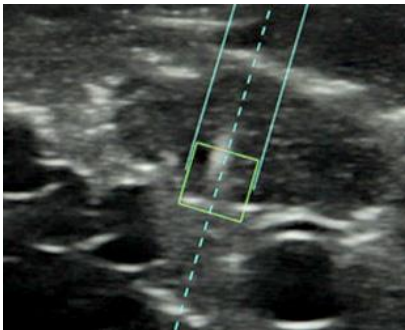
Out of Plane: The alignment indicator helps identifying the needle when it reaches the ultrasound imaging plane. While moving towards the imaging plane, the indicator changes color from red to green.

Needle Trajectory and Tip Position

Using Augmented Reality (AR) technology to display the expected needle trajectory over the ultrasound image. The Target box indicator changes its color from red to green when the needle approaches the ultrasound image plane, allowing to easily identify that the region of interest has been reached.

The expected needle position is shown before the needle punctures the skin.

Laptop requirements: Request by email at info@valkyrie-sales.com.



Handheld Ultrasound Probe with Needle Navigation Technology
(Probe with Laptop)

EZ-SE1P



 **ezono**
Authorized Distributor

Valkyrie Training Solutions

Valkyrie has a proven track record in the creation and provision of Simulator based training solutions.

Our holistic and inclusive approach to system design ensure that your training is not only realistic, but is optimized to meet your specific performance outcomes.

Valkyrie offer a comprehensive range of unique simulation systems for developing essential ultrasound skills. Our solutions are second to none and are renowned for their accuracy and durability.

DESIGN

Each MiniSim has been designed to optimize the development of specific knowledge and skills using landmark and ultrasound guided procedural techniques. All models contain internal and external landmarks necessary to practice ultrasound visualization and placement of needle and catheter necessary to accomplish peripheral nerve blocks or vascular access.

FOOTPRINT

The system footprint is small to facilitate the utilization of multiple units simultaneously, making it ideal for work-shops and simulation labs. Small footprint and standardized packing size allows for easy storage and transport.

EXPERT INPUT

Each MiniSim has been reviewed by leaders in the field of point of care ultrasound to ensure that all the relevant external and internal landmarks for each block are included and accurate.



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