![Gphantom logo]

Gphantom Manual Anesthesia RL

This manual contains information and instructions on setting up Gphantom Anesthesia RL.

Gphantom

Thank you for choosing Gphantom!

We are a company specialized in developing solutions for medical training. If you would like specific models for your training, please contact us. Here we will help you handle and optimize the durability of your product.

Your **Gphantom Anesthesia RL** is eligible for the Gphantom Loyalty Program.

See conditions.

LEARN. PRATICE. IMPROVE.

Receiving your Gphantom

The Gphantom Anesthesia is a model that has six internal structures that simulate three nerves and three arteries, arranged in an alternating manner. It is indicated for training ultrasound-guided regional anesthesia and central venous access procedures.

Receiving your Gphantom

The packaging of your Gphantom Anesthesia RL contains:

· Model packed in bubble wrap;
· Transport bag;
· QR code card to access manuals;

Starting your training

· Remove the model from the packaging, keeping the product on the original base.
· Prepare your ultrasound system and equipment;
· Separate needles and other necessary materials;
· Access our ebook (ebook.gphantom.com.br) to make the most of your training.

Handling and Maintenance

- Only perform the procedures supported by each product as described in this guide.
- Only use needles to access fluids.
- Do not use or store other sharp objects, such as scissors, scalpels or box cutters, next to your Gphantom.
- Do not insert any objects or tools into the model except medical equipment, accessories, or supplies intended for use with this model.
- Do not use chemical solvents on models.
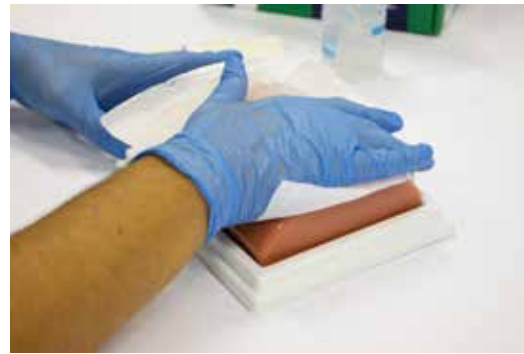- Always store your product in its packaging and in a cool place, away from the sun.

- Exposing your Gphantom to temperatures above 30°C for long periods may cause deformation and loss of properties.
- For training, remove the model from the packaging, keeping the product on the original base.
- After training, clean the product with a paper towel, removing excess ultrasound gel, and then wash it under running water, without removing it from the base.
- Do not store Gphantom with excess gel, as this may cause a bad smell, thus reducing the product's durability.
- Do not use detergents or sponges, as these will damage the product!

Cleaning

- Clean the training model only with water and a light soap solution, if necessary, wash under running water. Do not submerge the model or use large amounts of liquid to wash it.
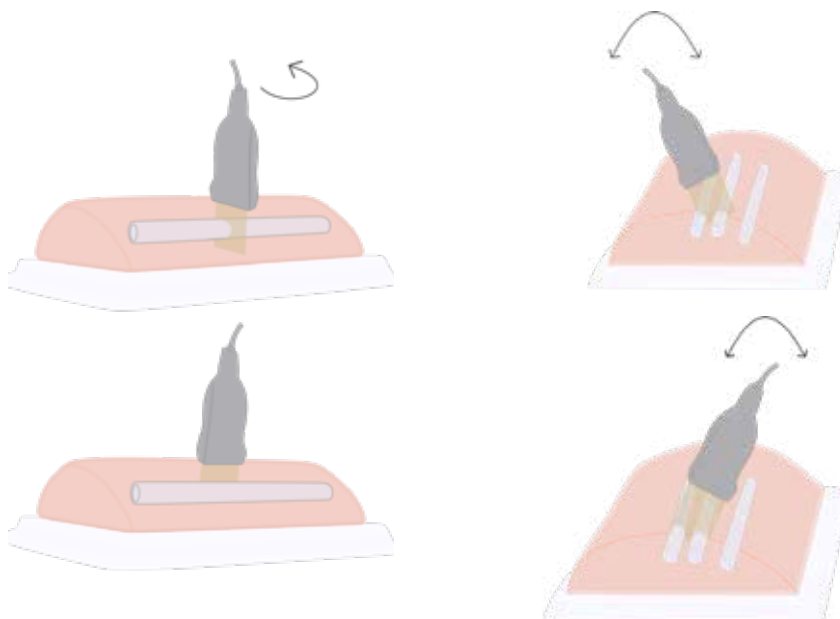- Do not remove the product from the base.

Storage and Transport

- Always store the product in a cool place, away from the sun.
- Transport the product in its packaging.
- Make sure there is nothing inside the packaging that could damage your product.
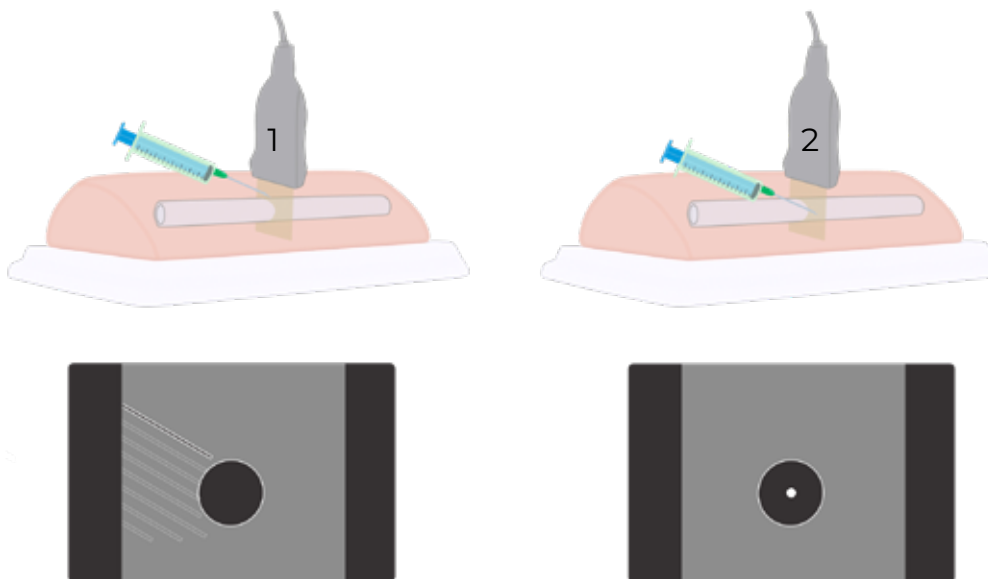
Ultrasound scanning

- Position the model correctly to use ultrasound on it.
- Apply a small layer of contact gel to the product or the transducer, in an amount sufficient to slide the transducer easily across the model. Add more gel if necessary.
- Adjust the ultrasound control system according to your protocol.
- Position the image according to your need.
- The structures are imaged in different planes, depending on the positioning and angle of the transducer in relation to the tissue. Optimizing a B-Mode image depends on several factors, such as equipment adjustments and transducer positioning. Therefore, it is important to understand the relationship between the ultrasound image plane and the morphology of the imaged tissue. For more information, return to our online ebook presented at the beginning of this manual.
- The correct positioning of the transducer, which allows obtaining precise images with optimized brightness, occurs with the probe in a perpendicular position to the tissue. When the transducer is tilted, forming an angle less than 90° with the tissue surface, the image brightness reduces and the representation of the structure is distorted.
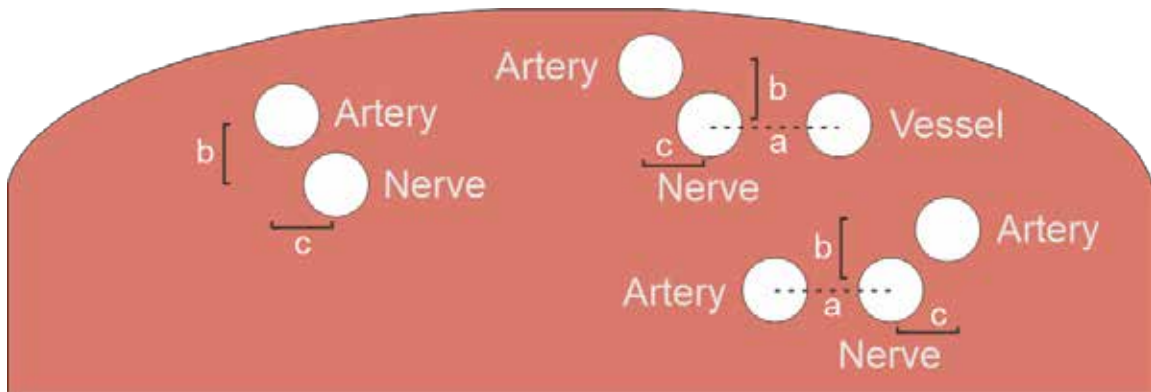
Needling

- For best needle mark recovery results, we recommend using needles up to 23G. However, it is possible to use Gphantom for Core-Biopsy training, taking advantage of the length of the training block models. Even though the use of larger gauge needles reduces the useful life of the Gphantoms, our needle mark recovery technology continues to work on the models, ensuring good durability.

1. IN PLANE
- In the in-plane approach, the entire length of the needle is visualized, in a longitudinal view. It is possible to obtain a continuous visualization of the trajectory of the needle and its tip.

2. OUT OF PLAN
- In the out-of-plane approach, the needle is inserted orthogonally to the imaging plane, obtaining a transverse image of the position of its tip, which is visualized as a bright point.
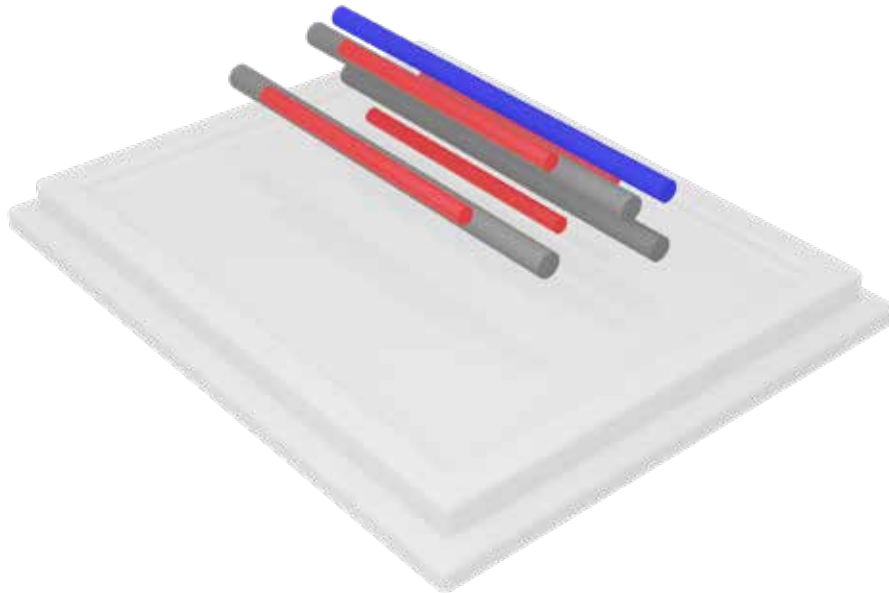
Specifications

Item	Size (mm)
a	12,4
b	6
c	6

Structure	Diâmetro (mm)
Artery	4
Vein	6
Nerve	5
Positioning	**Distance (mm)**
	8,5-29

*Distances may change.

Internal structures
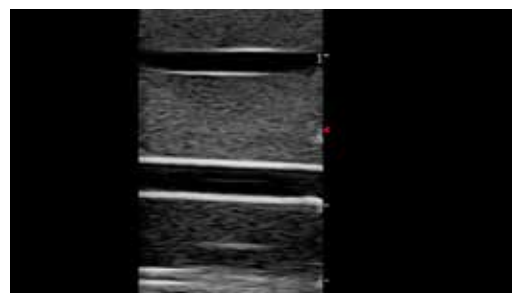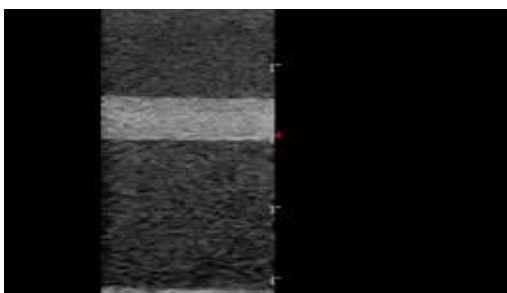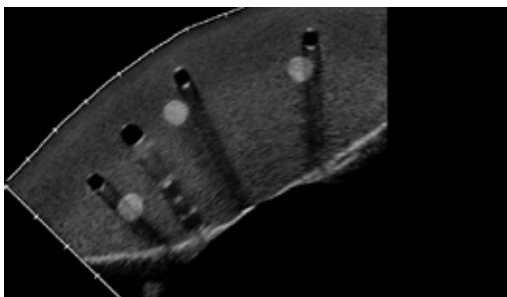

Product code   PBD050502D
Weight approx. (without packaging)   700 g
Length   17 cm
Height   4 cm
Width   13 cm

Vein 🔴
Artery 🔵
Nerve ⚪

B-mode ultrasound images of the model.

CONTACT

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Gphantom

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Gphantom

Consult the feasibility of custom development
of a Gphantom product for your needs.