Instructions and User Guide

Transversus Abdominis Plane (TAP) Block
Ultrasound Training Model
BP2001-TAP

June 08, 2011 Rev 2.0
## Contents

3  **Chapter 1: Overview**  
   Giving you the confidence only experience can offer™  
   About Blue Phantom™  
   Blue Phantom™ Warranty  

4  **Chapter 2: Product Cautions**  
   Important Safeguards  

5  **Chapter 3: Product Information**  
   Blue Phantom™ TAP Block Ultrasound Training Model  
   Included in this Package  
   Additional Items Required for Training  
   Optional Accessories for Your Training Model  
   Introduction to Your Training Model  
   Quick Facts about Your Training Model  

6  **Chapter 4: Utilizing Your Training Model**  
   Anatomy of Your Training Model  
   Using Your Training Model  
   Using Needles  
   Performing TAP Block Procedures  

8  **Chapter 5: Caring for Your Training Model**  
   Proper Use and Care  
   Installing Replacement Tissue Inserts  
   Cleaning Your Training Model  
   Storing Your Training Model  
   Blue Phantom™ Customer Support
Overview

Giving you the confidence only experience can offer™

Congratulations on the purchase of your Blue Phantom™ ultrasound model(s) for hands-on training. Every product we manufacture at Blue Phantom™ is specifically designed to be the most realistic and ultra-durable ultrasound simulation phantoms available anywhere. Our high standards for quality manufacturing and design guarantee that you receive only the absolute best.

About Blue Phantom™

Blue Phantom™ brings you the most realistic and durable hands-on ultrasound training models available anywhere. At Blue Phantom™ we know that learning to use ultrasound requires practice. You gain confidence and skill through experience. That is why we offer you the best ultrasound simulation training available.

Blue Phantom™ Warranty

Blue Phantom™ takes pride in its quality design and manufacturing standards. Our products are warranted to you by Blue Phantom™ for one year from the date of purchase against defects in workmanship and materials. During the warranty period, a defective part or product will be replaced either with a new or reconditioned part or product, depending on the availability at the time.

This warranty covers normal consumer usage and does not cover damage incurred through use not consistent with the product design. Failure that results from alteration, accident, misuse, vandalism, or neglect is not covered under this warranty. This warranty does not extend to any products that have been used in violation of written instructions.
Product Cautions

Please read this instruction guide carefully. Do not begin using this model until you fully understand these safeguards and have read the user guide in its entirety.

Important Safeguards
1. Read Instructions – All safety and operating instructions should be read before the unit is operated.
2. While all parts of this user guide are important, the red flag that you see to the left denotes especially important content. Please familiarize yourself with all of the content prior to using your training model or damage to the model can occur.
3. This user guide includes instructions applicable to a variety of model configurations.
4. Retain Instructions – The safety and operating instructions should be retained for future reference.
5. Heed Warnings – All warnings in the operating instructions should be adhered to.
6. Follow Instructions – All operating and maintenance instructions should be followed.
7. Weight Warning—Use caution as this model is heavy. Use proper lifting techniques to prevent bodily injury. Notify others of the heavy weight warning to prevent others from being injured while operating or moving the model. Product weight is approximately 25lbs (11kg).
8. Care must be taken to place the model in a position in which it will not fall off of the bed or surface, as this may cause injury.
9. Accessories – Do not place this unit on an unstable cart, stand, tripod, bracket, or table. The unit may fall causing serious injury to a child or adult, and serious injury to the unit.
10. CAUTION: Please use extreme care when using needles and sharp objects as to not accidentally injure yourself during training.
Product Information

Blue Phantom™ TAP Block Ultrasound Training Model
Blue Phantom™ Transversus Abdominis Plane Block Ultrasound Training Model (BP2001-TAP)

Included in this Package
- Blue Phantom™ TAP Block Ultrasound Training Model (BP2001-TAP)
- User Guide and Utilities CD

Additional Items Required for Training
- For optimal performance, please use 18-21 gauge sharp and unbent needles (please see Chapter 4: Utilizing Your Training Model—Using Needles section on page 7 of this user guide)
- Ultrasound system configured with an abdominal transducer
- Ultrasound gel

Optional Accessories for Your Training Model
- TAP Block Replacement Tissue (BP2002-TAP)
- Blue Phantom™ Red Ultrasound Refill Solution (BRS180-Red)
- Soft Storage Case (BPH602-B)

Introduction to Your Training Model
This model is intended as a hands-on training platform for TAP block training. The model is designed to be extremely realistic and Blue Phantom’s self healing design provides you with superb durability. In order to get the most out of your training platform, it is important that you properly care for your model.

Quick Facts about Your Training Model
- Excellent for training clinicians the psychomotor skills associated with ultrasound guided TAP block procedures
- Model provides tactile feedback as users penetrate through the tissue layers of the external oblique muscle, internal oblique muscle, transversus abdominis muscles, and the peritoneum
- Utilize anatomical landmarks for blind insertion technique, or utilize ultrasound guided procedural technique
- Superb ultrasound imaging characteristics
- Performs well with any standard ultrasound system
- Made in USA
Utilizing Your Training Model

Blue Phantom™ TAP Block Ultrasound Training Model
BP2001-TAP

Anatomy of Your Training Model
1. Remove your training model from its shipping container and make sure that you have received all of the items listed in Chapter 3: Product Information—Included in this Package section on page 5 of this user guide. If you did not receive one of the listed items, or if you received the wrong items, please contact Blue Phantom™ Customer Support immediately:
   Telephone: (425)881-8830
   Email: customersupport@bluephantom.com
   Web: www.bluephantom.com

2. Familiarize yourself with your training model.

   Blue Phantom™ ultrasound training models are constructed using our patented simulated ultrasound tissue and mimics imaging characteristics to that of human tissue. Care must be taken to not place the model on rough surfaces as the model can take on the characteristics of that surface. Do not place objects under the model as the tissue is soft and will conform to the shape of the object.

Using Your Training Model
1. Remove your Blue Phantom™ from its packaging and place on a clean, hard, flat surface.
2. This model performs equally well, whether you utilize ultrasound guidance or blind insertion techniques. Please see steps 3-4 below if you plan to utilize ultrasound guidance.
3. If utilizing ultrasound guidance, place ultrasound gel on the model or on the ultrasound transducer in adequate quantities so that the probe slides effortlessly across the surface of the model. Add more gel as necessary.
4. Adjust the ultrasound system controls per the manufacturer’s instructions, increasing and decreasing the depth and gain controls until the desired image is obtained.

   If you intend on guiding sharp objects into the phantom, never place the model in a location where you might accidentally puncture yourself.
Using Needles

1. For best performance, we recommend that you utilize new, sharp, unbent 18-21 gauge needles when accessing the structures in the model.
2. Do not use any needle larger than 18 gauge or permanent damage to your model may occur.
3. Smaller bore needles (>21 gauge) can bend during use and damage your model’s simulated tissue.
4. Aggressive repositioning of needles rather than removing and repositioning can cause stubborn or permanent needle tracks due to the needle tip dragging through the simulated tissue.
5. Dull needles may also cause permanent damage to the tissue. It is important to replace needles approximately every ten cannulations.

Performing TAP Block Procedures

The Blue Phantom™ TAP Block model accommodates full TAP Block procedural training, including:

- Create a sterile field
- Inject/infuse local anesthetics and Blue Phantom™ Ultrasound Refill Solution
- Encounter tactile feedback as you penetrate through tissue layers including the external oblique muscle, internal oblique muscle, transversus abdominis muscles, and the peritoneum

Please always utilize sharp and unbent 18-21 gauge needles. For more information, please refer to Chapter 4: Utilizing Your Training Model—Using Needles section on page 7 of this user guide. Always heed the following warnings while utilizing your training model:

1. DO NOT use antiseptics such as iodine on your training model. This may cause permanent damage to the simulated tissue.
2. It is suitable to inject/infuse local anesthetics, saline, and Blue Phantom™ Ultrasound Refill Solution. NEVER inject tap water into your training model.
3. Purge all air from the needle prior to infusing fluid into the model. Infusing air into the model during training can cause air to remain in the tissue, resulting in a visible air bubble. Residual air in the needle injection site can be remedied by injecting fluid into the air bubble until the air is flushed from the system.
4. Any injected fluids will require removal. Fluid is easily expelled from the model by removing the forward pressure on the syringe plunger at the injection site. This allows the fluid to be easily taken back into the syringe. Aspiration of accumulated fluid can be accomplished by applying negative pressure to the syringe plunger upon completion of the injection process.
Caring for Your Training Model

Proper Use and Care
Proper care of your training model will result in tremendous utility. Please heed all instructions contained in this user guide when using your model.

Installing Replacement Tissue Inserts
Installing a replacement tissue insert into your Blue Phantom™ TAP Block ultrasound training model is a simple process that will take approximately 10 minutes.

Directions
1. Position your TAP Block training model on a clear workspace.
2. Holding onto the top of the tissue insert, gently lift the tissue insert module superiorly so that it pulls the tissue insert out of the model.
3. Completely remove the tissue insert module from the base TAP Block platform.
4. Now you are ready to insert the new tissue insert. Gently position the tissue insert into the recess until it is positioned flush with the surface of the TAP Block platform.
5. Make any necessary adjustment to the tissue insert so that the insert is properly positioned.

For more information, please refer to our instructional YouTube movie on How To Replace Ultrasound Tissue Inserts.

Cleaning Your Training Model
After each use, your training model can be easily cleaned using mild soapy water. For best results, mix one part liquid soap with one part tap water. Gently rinse the model with the soapy water to remove any accumulated debris.

Use a clean, soft, lint-free cloth to dry after cleaning. Dry the model using a dabbing motion, rather than wiping or rubbing the model.

Wiping or rubbing the surface aggressively can result in scuffing the simulated tissue.

(continued on next page)
Storing Your Training Model
The model can be stored at room temperature either in the open or in the Blue Phantom™ soft storage case (optional).

Do not store the model in contact with other objects. This can cause the simulated tissue to become deformed.

Blue Phantom™ Customer Support
Blue Phantom™ is committed to providing you with superb products and uncompromising customer support. Should you require assistance feel free to contact us directly at:

Telephone: (425)881-8830
Email: customersupport@bluephantom.com
Web: www.bluephantom.com