

# TruIV Block

## User Manual

IV Cannulation

Ultrasound Training Model



*Part of the TruUltra product range, the TruIV Block allows learners to gain proficiency in the skills associated with IV cannulation. Featuring 8 veins (superficial and deep), users can practise the use of ultrasound during IV procedures.*

*Fascia layers enhance realism, while the model is easily transportable and can be set-up in less than 5 minutes – perfect for a busy teaching environment. The TruUltra material known for its durability, will withstand repeated use of approximately 4000 needles before needing replaced.*

*TruIV Block is ideal for emergency medicine, radiology, surgical training programs, ultrasound training programs, simulation centres, medical education facilities, and ultrasound manufacturers for ultrasound education and demonstrations.*



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## Product specifications

**Product Code:** TIV100

**TruIV Block weight:** Approx. 1.2kg

**TruIV Block insert dimensions:** 21 x 12 x 5cm

**Full shipment weight:** Approx. 2kg

**Full shipment dimensions:** 32 x 19 x 19cm

## Package contents

- 1 TruIV Block unit (TIV100)
- 1 TruIV Block carrier case
- 1 USB pen drive user manual
- 2 tubes with luerlock connectors for fluid insertion/removal

## Recommended equipment sizes

- Size 20G needle for IV cannulation
- Please do not use needles larger than 18G. This can cause permanent damage to the model and may void the product warranty (please refer to page 10 for warranty information)

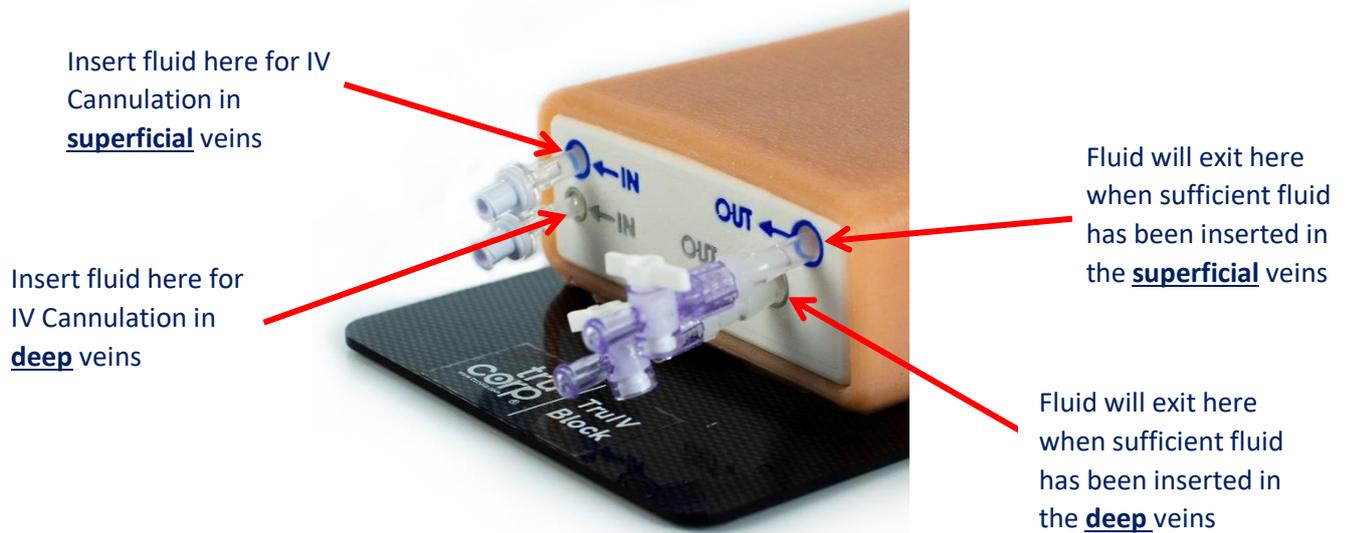
## Initial Set-Up & Fluid Insertion

- Gently remove the model from the carrier case and place on a suitable flat surface
- In line with clinical guidelines, ultrasound gel should be applied to the ultrasound probe prior to use to ensure a high-quality ultrasound image is obtained
- Any brand of ultrasound machine can be used with this model. Adjust the depth and gain controls as required until the desired image is obtained
- Please follow these next steps to insert fluid into the model:

1. Prepare approx. 200ml of artificial blood and add to a luer lock syringe. We recommend purchasing TruCorp's artificial blood concentrate (product code: CVB250 – not supplied with the model) but alternative brands are suitable.



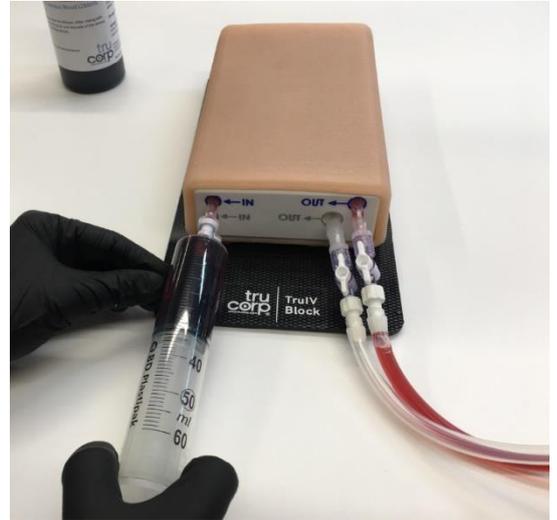
- There are 2 layers in the TruIV Block to feature 4 superficial and 4 deep veins. For each layer, there is 1 port labelled 'IN' and 1 port labelled 'OUT'.



- Attach the 2 tubes provided with the model to both ports labelled 'OUT'. These tubes will collect excess fluid, so the end of each tube should be placed carefully into an empty container
- Ensure the 2 switches on both connectors (highlighted by the blue arrows below) are open to allow the fluid to exit through the tubes. When open, the switches are positioned parallel to the block:



5. To insert fluid for the **superficial** veins, attach the blood-filled syringe to the **upper blue 'IN'** connector
6. Slowly push the blood through the syringe until it is seen exiting the tube connected to the **upper blue 'OUT'** port with no air bubbles



7. Close the switch on the **upper blue 'OUT'** tube for the superficial veins by turning it so it no longer aligns parallel to the model



8. To insert fluid for the **deep** veins, attach the blood-filled syringe to the **upper grey** 'IN' connector
9. Slowly push the blood through the syringe until it is seen exiting the tube connected to the **lower grey** 'OUT' port with no air bubbles



10. Close the switch on the **lower grey** 'OUT' tube for the deep veins by turning it so it no longer aligns parallel to the model



11. The 2 tubes at both of the 'OUT' ports can be disconnected now if desired

## IV cannulation

1. Practise probe positioning and movement, and recognition of veins in soft responsive tissue
2. Practise using ultrasound to target the veins for vascular access procedures
3. In line with clinical guidelines, ultrasound gel should be applied to the ultrasound probe prior to use to ensure a high-quality ultrasound image is obtained
4. Features 4 superficial veins with diameters of 4mm, 5mm, 6mm and 8mm
5. Features 4 deep veins with diameters of 4mm, 2 x 6mm, and 8mm
6. Correct needle placement can be visually confirmed by withdrawing blood into a syringe attached to the needle
7. Real feel vascular 'tenting' upon entry into the vessel
8. Self-regenerating TruUltra material has been designed to facilitate 4000+ needle penetrations which will disappear by up to 90% after a 24h resting period (500+ needles for each of the 8 veins)
9. A 20G needle should be used for IV techniques for optimal performance. Using a needle larger than this may void the warranty if damage is caused to the model (please refer to page 10 for warranty information)

## Removing Fluids

**This is recommended when the model is being transported, or kept in storage for extended periods of time** (keeping fluid in the system short-term will not damage the model)

1. To remove blood from the **superficial** veins, attach a syringe to the **upper blue** 'OUT' port and gently withdraw until no more fluid remains
2. To remove blood from the **deep** veins, attach a syringe to the **upper grey** 'OUT' port and gently withdraw until no more fluid remains

## Replacing the ultrasound insert

1. **Important:** Please do not discard the base or tubes supplied with your original model. A replacement insert includes only the block which IV cannulation is practised upon – the base and tubing from your original order is re-used
2. Lift the ultrasound insert off the base (not attached via glue or connectors etc.)
3. Align the new insert onto the existing base and re-position
4. Please ensure the insert sits firmly with sufficient grip to avoid the insert moving during training



## Care and maintenance

Store the product in clean, dry conditions away from heat and direct sunlight; avoid contact with metals, solvents, oils or greases and strong detergents. When the product is not in use please store in the black carrier case provided.

Gently wash the ultrasound insert after use. Please use alcohol wipes, warm soapy water or similar, until all visible foreign matter and residue are removed.

Mild detergents or enzymatic cleaning agents may be used on the insert in accordance with the manufacturer's instructions and at the proper dilution. The detergent must not contain skin or mucous membrane irritants.

*Please do not use any of the following when cleaning the AirSim product range*

- Germicides, disinfectants, or chemical agents such as glutaraldehyde (e.g. Cidex®),
- Ethylene oxide, phenol-based cleaners or iodine-containing cleaners

**In response to the recent COVID-19 pandemic, we recommend this additional step to ensure the product is fully sanitised:**

Use alcohol spray (minimum 75%) and wipe off. Repeat this for 3-4 times to ensure to kill the virus completely.

## Warranty

TruCorp warrants this unit to be free of defects in materials and workmanship and to give satisfactory service for a period of 1-year from the date of delivery. This ensures that our customers receive maximum coverage on each product. If the unit should malfunction it must be returned to the factory for evaluation. Upon examination by TruCorp, if the unit is found to be defective it will be repaired or replaced at no charge.

TruCorp will pay for the freight/delivery and the actual parts needed free of charge if any part of the product fails within the 1-year period.

However, these warranties are VOID, if; the unit shows evidence of having been tampered with or shows evidence of having been damaged by excessive heat, the use of sharp instruments, misapplication, misuse or other operating conditions outside of TruCorp's control. Components which wear or are damaged by misuse are not warranted and will be charged for if repair has been approved. Please ensure to strictly follow the recommended equipment sizes on page 3. Warranty is void if third party products are seen to have damaged or caused failure of the TruCorp models.

**Please direct all warranty and repair inquiries to:**



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