



# **ATLAS BABY THE ALS PEDIATRIC SIMULATOR P77**

# ATLAS BABY THE ALS PEDIATRIC SIMULATOR P77

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# ATLAS BABY THE ALS PEDIATRIC SIMULATOR P77

## > PRODUCT INTRODUCTION

Atlas Baby is the ALS pediatric simulator by 3B Scientific used for conducting interdisciplinary and interprofessional emergency training. It offers extensive emergency-specific applications for advanced life support in simulation-based training and further training.

## > DELIVERY CONTENT



- 1. Atlas Baby Manikin
- 2. Replacement IO Leg
- 3. Replacement IV Hand

- 4. Replacement IM Insert
- 5. Umbilical Cord Stump
- 6. Lubricant

- 7. Charger and Adapters
- 8. Carry Bag

# ATLAS BABY THE ALS PEDIATRIC SIMULATOR P77

## > FEATURES

### Atlas Baby features:

- Atlas Baby replicates the anatomy of the airways, complete with tongue, epiglottis, vocal cords, trachea, and esophagus.
- Airway management - head-tilt/chin-lift or the Esmarch maneuver.
- Ability to clear the airway includes simulated aspiration and removing inserted foreign bodies. No fluids.
- The airway of the simulator can accommodate extra-/supra-glottic airway alternatives and oral and nasal intubation.
- Advanced airway, for insertion of oral airways (OPA) and nasal airways (NPA).
- Intraosseous (IO) vascular access via the left tibia and distal femur.
- Intravenous (IV) vascular access via the left dorsal site. Umbilical vein catheterization.
- Intramuscular (IM) access via the right vastus lateralis muscle.
- Three different wide pupils (Normal/Constricted/Dilated).
- Palpable fontanelle.
- Stomach distension during resuscitation in case of hyperventilation or esophageal intubation.
- Inserting a nasogastric tube to decompress stomach distension.
- Umbilical Vein Catheter insertion via the umbilical cord.



### Atlas Baby features in combination with REALiTi 360:

Atlas Baby works with REALiTi 360 using Wi-Fi connection. By using on the fly or pre-programmed scenarios, the manikin and the virtual defibrillator interact. The following functions can be shown in combination with REALiTi 360 depending on the monitor interface selected:

- CPR dashboard screen for viewing all relevant parameters and values of cardiopulmonary resuscitation according to the AHA & ERC Guidelines.
- Atlas Baby allows observation and recognition of vital signs such as the brachial pulse.
- Automatic simulation control based on pre-programmed scenarios.
- Compression artifact waveform displayed in the ECG and information of the hand position, compression depth and rate displayed when performing chest compressions.
- Ventilation-triggered EtCO<sub>2</sub> waveforms provide information on ventilation rate and inspiratory tidal volume.
- Brachial pulse when using a perfusing rhythm (Systolic >50mmHg).
- Using dynamic vital signs provided by REALiTi 360, Atlas Baby can simulate different emergency scenarios including cardiac arrest that require a wide range of invasive procedures.
- REALiTi 360 extends the therapy options to defibrillation, cardioversion and pacemaker application on the real or generic monitor. The brachial pulse feature allows to determine the indication and success of applied intervention.



# ATLAS BABY THE ALS PEDIATRIC SIMULATOR P77

## > GENERAL HANDLING

Before using Atlas Baby keep in mind these safety instructions



- Wear gloves as required during simulation scenarios.
- Avoid using colored plastic gloves, as they may cause discoloration.



- The device may only be stored and charged in dry rooms.
- Operating temperature: 0 °C up to +30 °C
- Storage temperature: -10 °C up to +40 °C
- Air humidity: max. 85%



- To maintain Atlas Baby skin, wash hands before use and place Atlas Baby on a clean surface.
- To avoid permanent staining avoid the use of ink pens, felt-tipped markers, acetone, or iodine.
- Avoid placing Atlas Baby on newsprint or colored paper.
- After using Atlas Baby, remove glue residue from Atlas Baby skin with 70% ethyl alcohol wipes, if necessary.



- Charger input voltage range: 100-240V AC 50/60Hz
- Only use the charger provided by the manufacturer.
- Power supply: USB-C 5.0V DC / 3A
- Recommendation: Once the battery is fully charged, take it out of the charger. Getting the manikin overcharged puts more stress on the battery and can shorten the battery life.



- Ensure that Atlas Baby is properly secured during transportation to prevent personal injury or damage to the product.
- Always lubricate (silicon oil) the airway device (tracheal tubes, i-gel, ect.) before inserting it in the airway.



- Follow the instructions and keep in mind the warnings while using the product.

## > BATTERY SAFETY INSTRUCTIONS

**GENERAL:** The simulator is equipped with a built-in Li-Ion battery.

**AVOID OVERCHARGING:** Overcharging can lead to thermal runaway, where the battery overheats and potentially catches fire or explodes.

**NEVER SHORT CIRCUITS:** Ensure the battery is not punctured or damaged, as this can cause a short circuit, generating enough heat to ignite the flammable electrolyte.

**HANDLE WITH CARE:** Avoid dropping, crushing, or piercing the battery, as mechanical abuse can damage internal components and lead to safety hazards.

**TEMPERATURE CONTROL:** Do not expose the battery to high temperatures (above 50°C), as this can accelerate chemical reactions inside the battery, increasing the risk of thermal runaway.

**PROPER DISPOSAL:** Follow local disposal regulations when disposing of Li-Ion batteries to prevent environmental harm and potential safety risks.

## > SAFETY INSTRUCTIONS

To ensure optimum performance and durability of Atlas Baby, read and follow the user information and warnings:

- ⊗ **DO NOT** perform mouth-to-mouth or mouth-to-nose rescue breathing on Atlas Baby.
- ⊗ **DO NOT** introduce fluids into Atlas Baby with the exception of IV/IO/IM system.
- ⊗ **DO NOT** use electrotherapy or a live defibrillator or AED.
- ⊗ **DO NOT** use sharp objects in the airways.
- ⊗ **DO NOT** create a surgical airway.
- ⊗ **DO NOT** perform a relief puncture or inserting thoracic drains.
- ⊗ **DO NOT** use if there are signs of electrical malfunction, or unusual smell of smoke.
- ⊗ **DO NOT** use oxygen.
- ⊗ **DO NOT** use damaged chargers.
- ⊗ **DO NOT** take the battery apart. Never try to take the battery out of the device.
- ⊗ **DO NOT** try to repair the device yourself.
- ⊗ **DO NOT** use live defibrillators.
- ⊗ **DO NOT** use live cardiac pacing.
- ⊗ **DO NOT** operate the ATLAS BABY outside in rain. Do not immerse the ATLAS BABY in water.
- ⊗ **DO NOT** press excessively at the abdominal area. There is a danger of damaging electronics.
- ⓘ Packaging material of the ATLAS BABY is not a toy for children – danger of suffocation!
- ⓘ The ATLAS BABY should only be ventilated with certificated ventilation devices or ventilation masks.

# ATLAS BABY THE ALS PEDIATRIC SIMULATOR P77

## ➤ INSTALLATION

Atlas Baby features a color-coded indicator on the power button, which serves to display the status of its Wi-Fi connection through different colors:

Description	Status
Yellow LED on for 2 seconds off for 2 seconds	Charging
Yellow LED on	Atlas Baby Powered On
Green LED On	Atlas Baby Powered On and WiFi Connected
Green LED and Yellow LED in turn	Charging with Atlas Baby Powered On and WiFi Connected
Red LED On	Atlas Baby Powered On and Bluetooth Connected
Red LED and Yellow LED in turn	Charging with Atlas Baby Powered On and Bluetooth Connected
Red LED and Green LED in turn	Atlas Baby Powered On and WiFi and Bluetooth Connected
Red LED, Green LED and Yellow LED in turn	Charging with Atlas Baby Powered On and WiFi and Bluetooth Connected
Yellow LED flashing fast	Error

Atlas Baby is 48 cm tall, weighs 2.5 kg and comes in two different skin tones. Atlas Baby can be charged using the provided charger and can be used wirelessly during training sessions.



Atlas Baby USB-C charging port can be found behind the left ear. There is a symbol of USB-C charging on the skin. Lift up the neck skin to find the USB-C charging port.



## ➤ AIRWAY

Atlas Baby replicates the anatomy of the airways, complete with tongue, epiglottis, vocal cords, trachea and esophagus. Use Atlas Baby to practice positioning of the head, manual maneuvers to open the airway and apply compatible aids for realistic airway management.

The airway can be opened by tilting back the head or by using the Esmarch maneuver. Other methods to clear the airway include simulated dry aspiration, removing inserted foreign bodies and inserting Guedel tubes (OPA) or Wendl tubes (NPA).

When bag mask ventilation (BVM) is performed correctly on Atlas Baby there is a visible expansion of the thorax. When ventilated above 20 mbar, the stomach will begin to distend. Decompression of the stomach can be performed the same as a real patient.

Nasal or oral intubation can be performed using a size 3 cuffed or 3.5 uncuffed endotracheal tube (ET). For optimal intubation, use the improved Jackson position and the BURP maneuver. To intubate use a Miller size 1 laryngoscopy, or video laryngoscopy.



### Recommended tube sizes:

- Oraltracheal tube 3.5 uncuffed or 3 cuffed
- Nasotracheal tube 3.5 uncuffed or 3 cuffed
- iGel 1
- Laryngeal mask 1
- Laryngeal tube 1



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By using auscultation and checking for an excursion in the thoracic region, you can determine whether bag-mask ventilation was performed correctly and if the airway was properly cleared. Likewise incorrect right stem intubations can be confirmed when there is chest excursion and lung sound in the right side. Use auscultation to check for an excursion in the abdomen to determine esophageal intubation.

Supra-glottic airway alternatives like, iGel, Laryngeal Masks (LMA) and Laryngeal Tubes (LT) can be used in accordance with manufacturers' instructions. Moreover a gastric probe can be inserted.

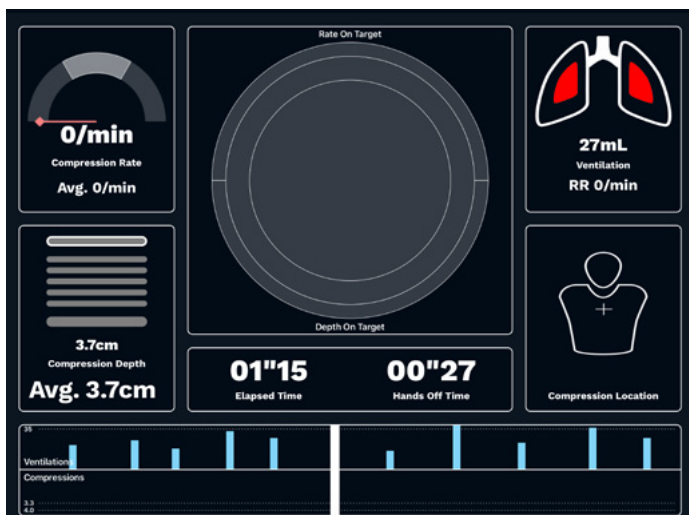


## Note:

Prior to using airway adjuncts, apply a small amount of silicon airway lubricant to the equipment.



In order to see the inspiratory tidal volume use the quality CPR Dashboard and generic defibrillator screen from REALiTi 360.



## Lung Specification

- Max tidal volume: 30-35 mL
- Max airway pressure: 55-60 mbar

# ATLAS BABY THE ALS PEDIATRIC SIMULATOR P77

## > CPR

Atlas Baby replicates the anatomy of a rib cage and enables thoracic compressions to be carried out in accordance with the resuscitation guidelines.

Thoracic compressions can be performed intermittently or continuously with bag-mask ventilation providing a realistic resistance of the chest during CPR.

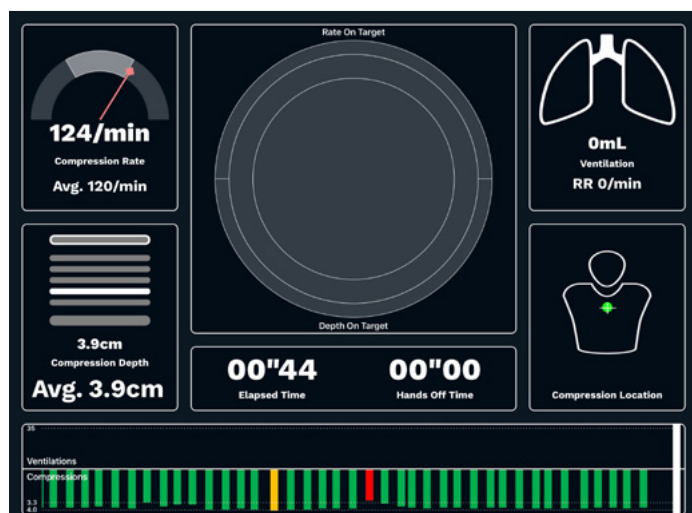
The CPR dashboard screen and Generic Defibrillator gives you feedback on the hand position.



With the use of REALITi 360 resuscitation artifact displays on the ECG tracing, in addition to the compression rate and depth being displayed on the monitor.

**The CPR Dashboard screen and Generic Defibrillator allows:**

- ✓ Compressions that generate ECG artifacts
- ✓ Realistic compression depth and resistance
- ✓ Detection of depth, release, and frequency of compressions
- ✓ Real-time view of Quality of CPR on the CPR Dashboard
- ✓ Detection of hand position
- ✓ Compliant with ILCOR resuscitation





# ATLAS BABY THE ALS PEDIATRIC SIMULATOR P77

## > CIRCULATION

Atlas Baby features an IV site for peripheral line placement on the left hand, two IO sites on the distal femur and tibia, an IM site in the vastus lateralis muscle and umbilical line catheter insertion via the umbilical line. When administering medication through the IV site, IO access sites, or IM access, connect a drain bag to the Luer lock adapter to manage fluids.



### Recommended puncture sizes

- IV: ≤22G
- IO: drilling system

To change the IV arm, IO leg and IM insert, remove them from their original position and disconnect them from the drainage system. Then connect the replacement to the drainage system and place the new parts in the slot. At the end of the training session, we recommend drying, removing the cannulas, and taking the drainage system apart.

When the day's sessions are done, flush the IV/IO sites with air to remove any fluid/liquid in the system. Connect a syringe filled with air to the IV/IO catheter and flush the IV/IO sites with air until only air exits the overflow tube.



To change umbilical cord, pull on the cord which should remove easily from the stomach and replace with a new cord or an umbilical stump. To lengthen life of umbilical cord, please use a simulated clamp.



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## > NEUROLOGICAL

Atlas Baby features a versatile pupillary assembly, offering three distinct eye states: normal, constricted, and dilated. Easily adjust the eyes by gently rolling open or closing the eyelids.



# ATLAS BABY THE ALS PEDIATRIC SIMULATOR P77

## Quick Start Guide

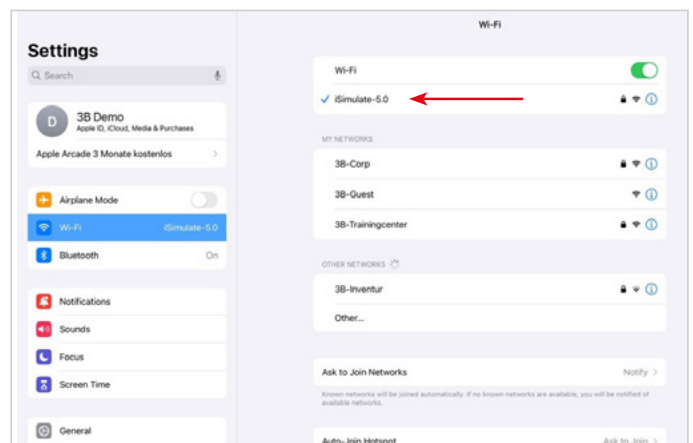
Thank you for purchasing Atlas Baby – the pediatric ALS Simulator

Connecting Atlas Baby with REALITi 360: A Simple Guide

### Scenario 1: Your existing Wi-Fi router is called iSimulate-5.0

1. **Power Up:** Start by turning on your iSimulate-5.0 router.
2. **Wi-Fi Connection:** Ensure both the REALITi Monitor iPad and the Control iPad are connected to the iSimulate-5.0 network.

WiFi Name: iSimulate-5.0  
Password: iSimulate2012

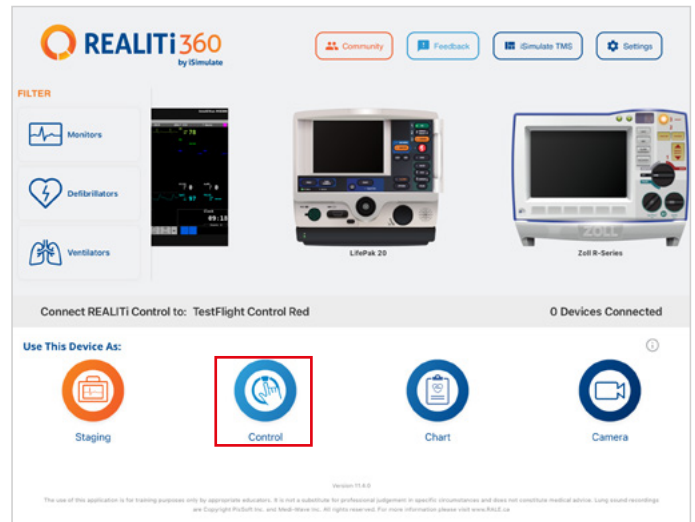
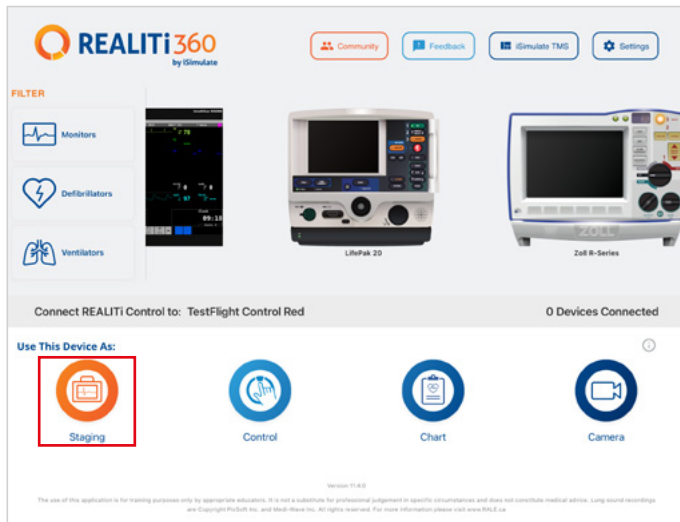


3. **Turn On Atlas Baby:** Locate and press the power button on the back of the manikin. This will automatically connect it to the iSimulate-5.0 network. Once the connection is successful, the power button will change from yellow to green.



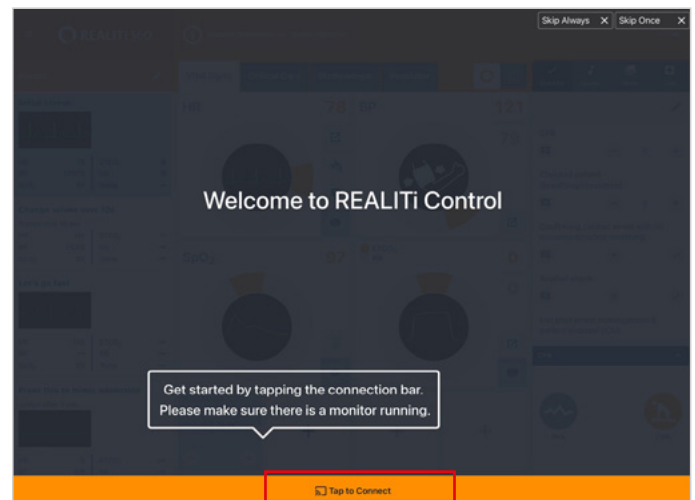
# ATLAS BABY THE ALS PEDIATRIC SIMULATOR P77

4. **Launch REALTi App:** Open the REALTi app on both iPads, selecting 'Staging' on the Monitor and 'Control' on the Control iPad.

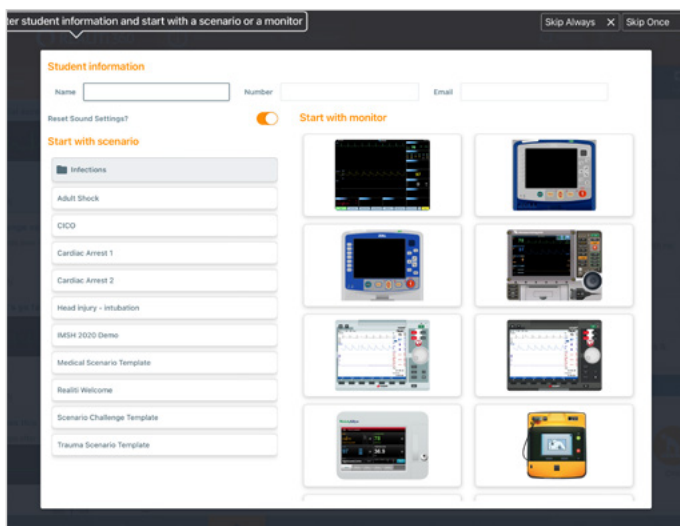


5. **Connect iPads:** Use the 'Tap to Connect' feature on the Control iPad to link both devices.

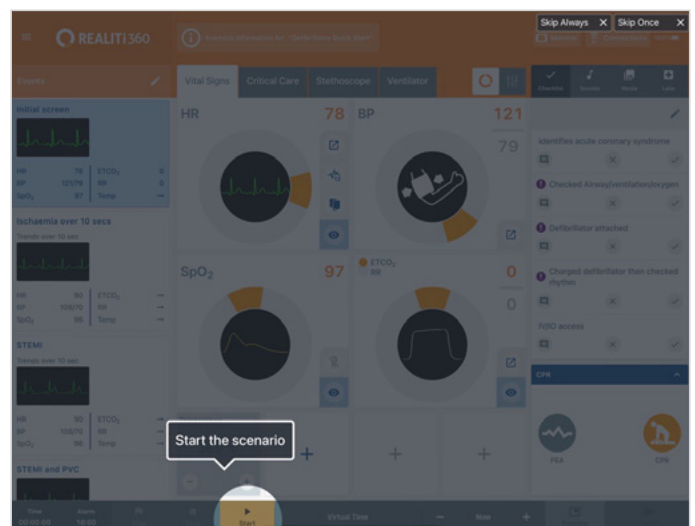
If the Monitor iPad does not appear in the list, check that the Staging iPad and the Monitor iPad are both connected to the Wi-Fi network of your REALTi router: iSimulate-5.0 (both iPads must be on the same Wi-Fi network).



6. **Choose and Start a Scenario:** From the Control iPad, select a scenario or monitor setup to begin.

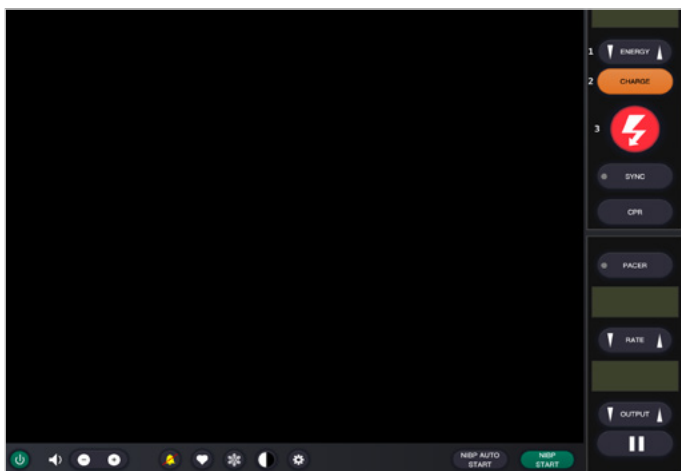


7. Select a scenario or monitor and tap the 'Start' button. Launch the Defibrillator from the main menu on the iPad:

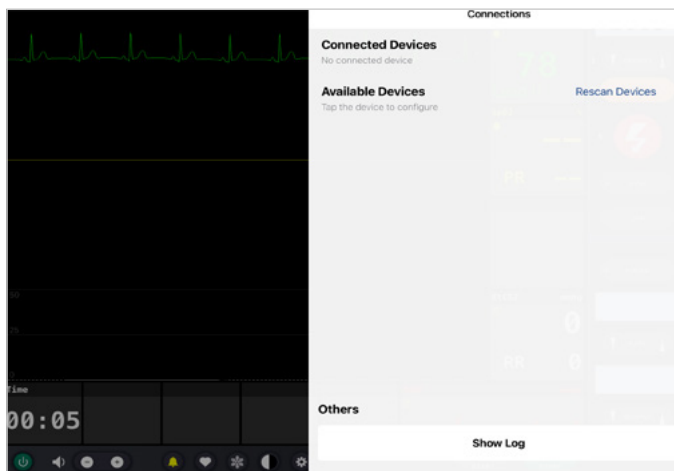


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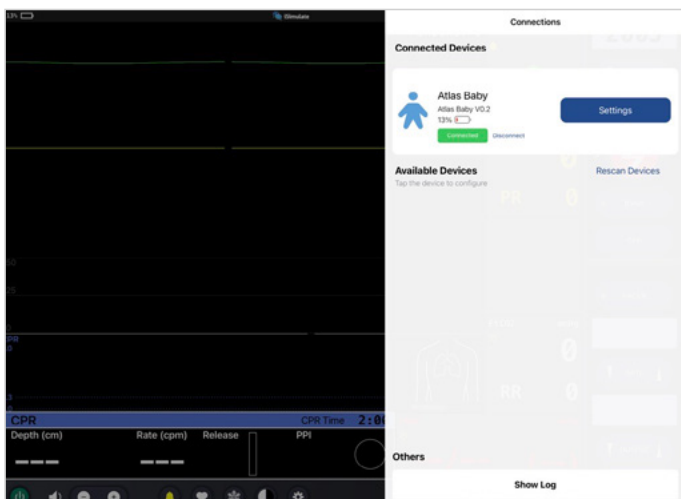
8. On the Monitor iPad, the scenario or monitor selected from step 7 should appear. Start the defibrillator.



9. **Scan for Atlas Baby:** Swipe in from the right screen edge of the Monitor iPad and tap “Rescan Devices” to show the “Available Devices”.



10. From the available devices select ‘Atlas Baby’ by tapping ‘Connect Device’. The connected Atlas Baby will be calibrated automatically.

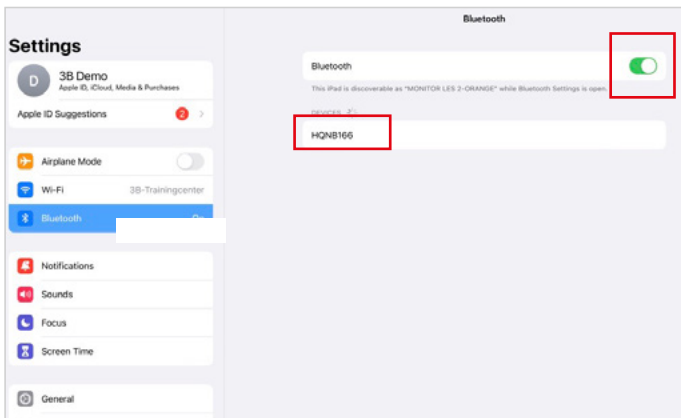


11. **Commence Simulation:** Compress the manikin. You will be able to see the CPR compression in the ECG waveform and the bar graph.



## Scenario 2: Your existing Wi-Fi router is not called iSumlate-5.0

1. **Bluetooth Settings:** On the Monitor iPad, switch on the Bluetooth and connect to Atlas Baby.

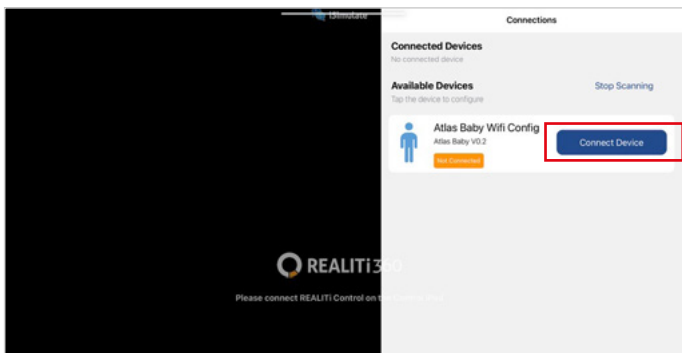


2. **Launch REALITi App:** On the Monitor iPad start the REALITi app and select the ‘Staging’ button:

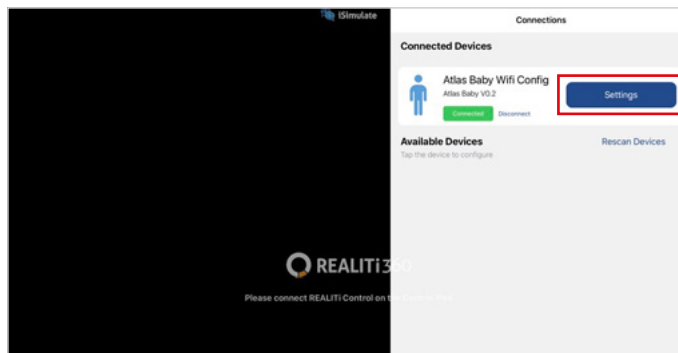


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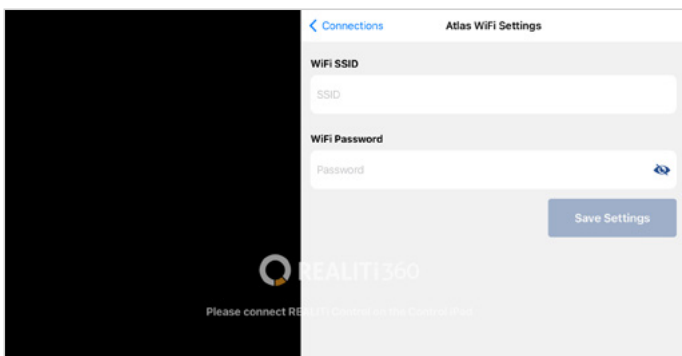
3. **Scan for Atlas Baby:** swipe in from the right edge of the Monitor iPad's to reveal the 'Available Devices' menu. Select 'Rescan Devices' and choose 'Atlas Baby Wi-Fi Config' from the list by tapping 'Connect Device.'



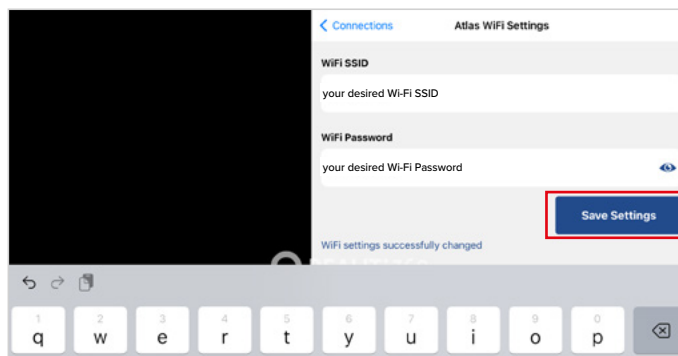
4. Upon successfully connecting to 'Atlas Baby Wi-Fi Config,' access the 'Settings'.



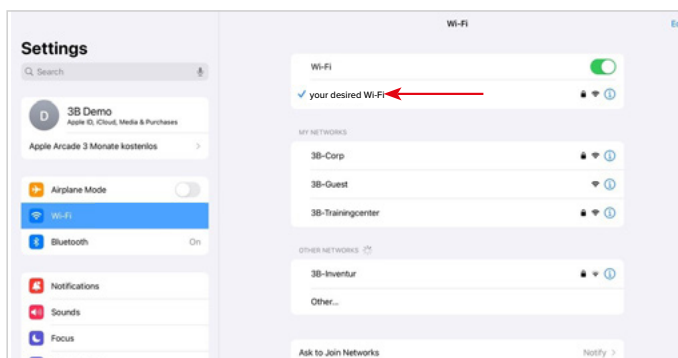
5. **Rename Wi-Fi SSID:** The Atlas Wi-Fi settings will show up, allowing you to customize the Wi-Fi network name to match your router. Ensure that both the Wi-Fi SSID (name) and password align with your Wi-Fi router.



6. After entering the desired Wi-Fi SSID and password, tap 'Save Settings' to apply the changes successfully to the Wi-Fi configuration.



7. Exit the app by doubling tapping the home button and swipe the app's preview card upward to close.
8. Turn off Atlas Baby.
9. Connect the Monitor iPad and the Staging iPad to the Wi-Fi network of your router. Both iPads must be on the same Wi-Fi network.
10. Follow step 3 to step 11 from scenario 1.



 **Atlas Baby is ready to start!**



# ATLAS BABY THE ALS PEDIATRIC SIMULATOR P77

## > FAQ

### My Atlas Baby is unable to connect to REALITi?

Cause	Solution
Incorrect Wi-Fi Network selected	<ul style="list-style-type: none"><li>Connect to the correct Wi-Fi on both iPads <b>NOTE:</b> Default SSID Wi-Fi "iSimulate-5.0" Default password is "iSimulate2012"</li><li>If operating more than one Atlas Baby, ensure each simulator has its own router/network to connect to.</li></ul> <p><b>NOTE:</b> Follow the procedure from the Quick Start Guide (How to connect Atlas Baby with REALITi360?)</p>
REALITi 360 App is not updated	Go to the App Store on both your iPads and update the REALITi 360 app to the latest version available
Atlas Baby too far from Wi-Fi	Move your network and REALITi system closer to Atlas Baby

### My connection with REALITi and Atlas Baby is lost?

Multiple network connections may interfere with transmissions between REALITi and Atlas Baby.

Forget other networks on both your iPads beside the network required to connect with Atlas Baby. Default network is "iSimulate-5.0"

### How to change the Wi-Fi setting on Atlas Baby?

The steps are available on page 13 of the Atlas Baby manual.

### Atlas Baby airways have become contaminated from mouth-to-mouth resuscitation

DO NOT perform mouth-to-mouth on Atlas Baby. If damage is reported:

- Clean the outside of Atlas Baby with manikin wipes.
- Clean the inside of the oral cavity with manikin wipes.
- Change the lung bag.

### No chest rise visible on Atlas Baby

- If chest-rise is unilateral, ETT may be inserted into the right main stem bronchus. Correct the insertion of the ETT.
- Lung bag is leaking or tubing to lung is twisted, kinked, or disconnected for which the lung bag will need to be replaced.
- Seal the airway.
- Check air tubing for leakage.
- Check that all connections are intact.
- Replacing tubing if necessary.

### Atlas Baby brachial pulse can not be felt

The following may be the cause:

- The blood pressure is set below 50mmHg Systolic.
- The connection is lost between the REALITi 360 app and Atlas Baby.
- Non-perfusing cardiac rhythm
- PEA rhythm

# ATLAS BABY THE ALS PEDIATRIC SIMULATOR P77

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## > REPLACEMENT PARTS

Consumables		Item No.
Umbilical Stump	light skin	1025673
	dark skin	1025674
IO replacement	light skin	1025677
	dark skin	1025678
IV replacement	light skin	1025675
	dark skin	1025676
IM replacement	light skin	1025679
	dark skin	1025680
Umbilical Cord		1025672

## > TECHNICAL DATA

Operating temperature: 0 °C up to +30 °C  
Storage temperature: -10 °C up to +40 °C  
Air humidity: max. 85%

## > CONTACT INFORMATION



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