

Need Help?

For technical issues please visit **rigelmedical.com** and view the Application Notes in the Downloads tab. Application Notes are regularly updated and will most likely cover any common issues.

For further assistance please contact your Rigel Medical supplier or use the following contact details to speak to a member of the Rigel Medical team:

Sales and Delivery enquiries

Email: sales@rigelmedical.com
Tel: +44 (0) 191 587 8730 **Fax:** +44 (0) 191 586 0227

Technical enquiries

Email: support@rigelmedical.com
Tel: +44 (0) 191 587 8701

Service, Calibration and Repair

Email: service@calibrationhouse.com
Tel: +44 (0) 191 587 8739 **Fax:** +44 (0) 191 518 4666

Remember to activate your 2 year warranty*
by registering your Rigel UNI-SIM with
Rigel Medical

Go to rigelmedical.com/register-product

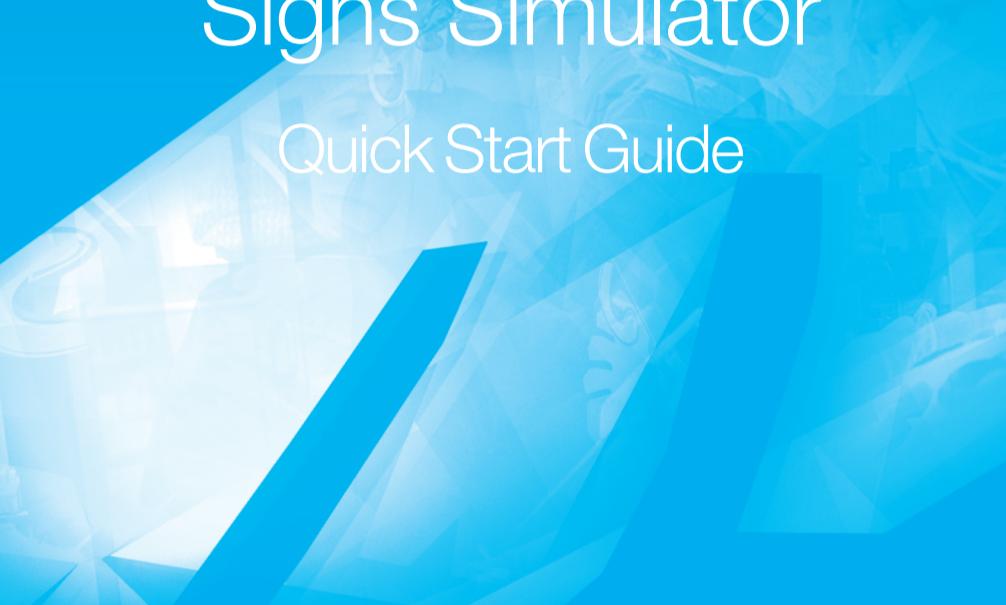


*Terms and Conditions apply. See website for details.

Rev 2.2
Part No. 370A598

Rigel UNI-SIM Hand-Held Vital Signs Simulator

Quick Start Guide



For further details visit www.rigelmedical.com/uni-sim.
A range of accessories are available to purchase with the UNI-SIM Hand-Held
Vital Signs Simulator including dedicated SP02 adapter boxes for various
technologies and a variety of IEP and Temperature cables to aid testing.

Accessories

- After long periods of storage under adverse environmental conditions
 - If the instrument does not function
 - If the instrument or leads show any sign of damage
- It must be assumed that safe operation is no longer possible:**
- If the UNI-SIM is used in a manner not specified by the manufacturer, the protection provided by the equipment may be impaired.
- The UNI-SIM is supplied with a mains power supply unit. The use of any other power supply unit may cause damage to the equipment and may result in a hazard to the user.
- This symbol indicates that the operating instructions must be adhered to in order to avoid danger.
- Important, follow the documentation!**
- Indicates instructions must be followed to avoid danger to persons.
- Warning of electrical danger!**

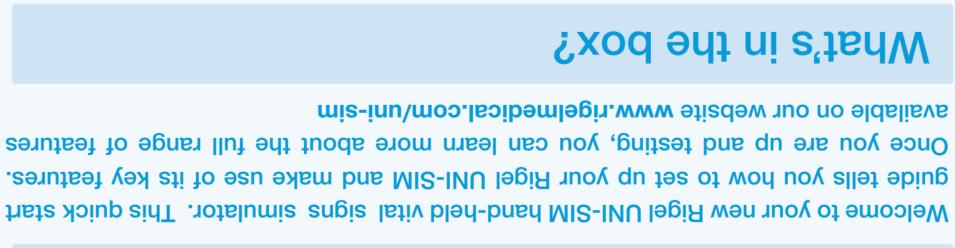
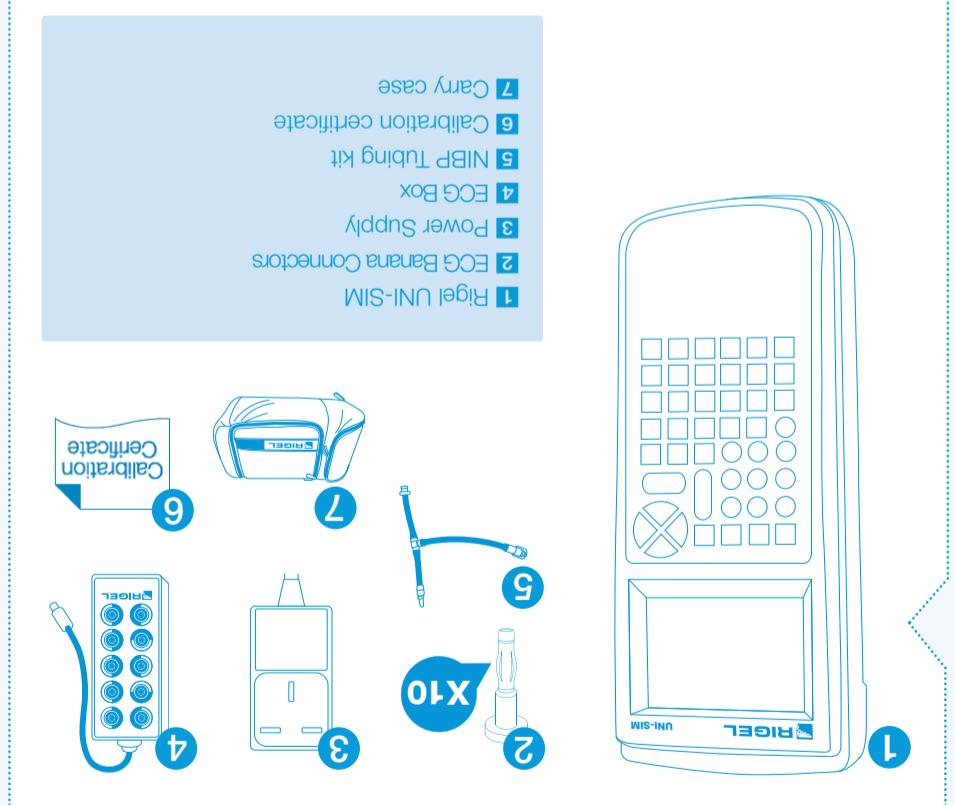
Warnings and Cautions

The following symbols are used throughout this Rigel Quick Start Guide and on the Rigel UNI-SIM.

User notes

If any items are missing on receipt of your new unit, please contact your equipment supplier immediately.

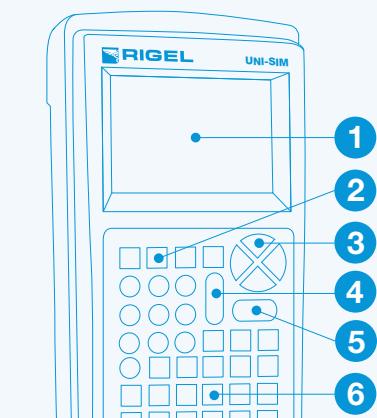
NOTICE



Welcome to your new Rigel UNI-SIM hand-held vital signs simulator. This quick start guide tells you how to set up your Rigel UNI-SIM and make use of its key features. Once you are up and testing, you can learn more about the full range of features available on our website www.rigelmedical.com/uni-sim.

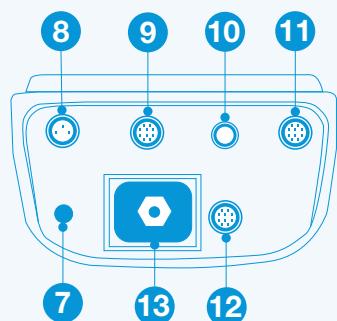
Introduction

1 Getting to know your Rigel UNI-SIM



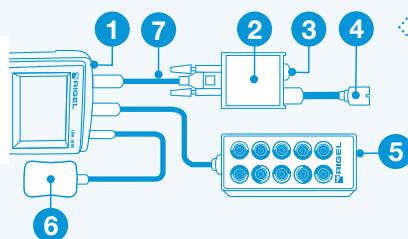
Rigel UNI-SIM

- 1 LCD screen
- 2 Function keys F1 - F4
- 3 Directional arrow keys
- 4 OFF/Stop key
- 5 ON/Start key
- 6 Alphanumeric keyboard



Rear Connection Panel

- 7 Mains power connection
- 8 Temperature simulation output
- 9 12 Lead ECG and Respiration Simulations output
- 10 High level ECG simulation output
- 11 IBP simulation output
- 12 SPO2 simulation output
- 13 NIBP Simulation/Pneumatic interface connector



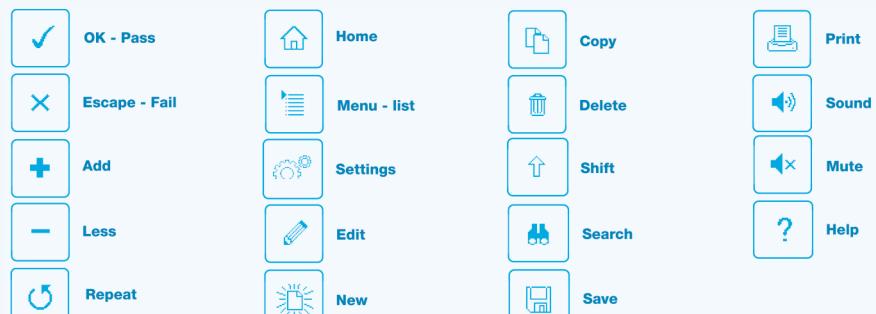
Accessory Set Up

- 1 UNI-SIM
- 2 SpO2 Module
- 3 Probe Connection
- 4 Connection to Patient Monitor
- 5 10 Lead ECG Adapter Box
- 6 Power supply
- 7 Module Cable

2 Unique use of icons

The Rigel UNI-SIM features a high resolution graphic back lit display which not only provides highly visible and easy to follow menu structures but also allows the user to operate the tester and the intuitive icons speed up test routines.

Rigel UNI-SIM icon key

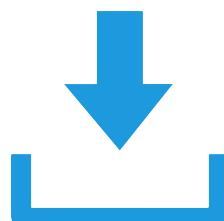


Instruction manual

This Quick Guide is designed to be used in conjunction with the full Rigel Uni-Sim instruction manual.

The Rigel Uni-Sim hand-held vital signs simulator instruction manual is available as a download from [riegelmedical.com/riegel-downloads](http://rigelmedical.com/riegel-downloads)

The download section also includes a free 30 day trial for our asset management software, Med-eBase.



3 Getting started

Switch on

Turn on your Rigel UNI-SIM by pressing and holding the green **ON** button until you hear a 'beep' and the Rigel splash screen appears

The summary simulation screen appears displaying the settings from the previous simulation for all parameters and can be repeated by simply pressing the green start key (NIBP, SPO2, ECG, Respiration, IBP and Temperature)

You are able to change one or all of these parameters at any time without stopping the simulation by pressing the function keys :

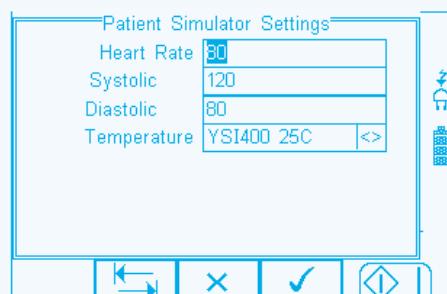
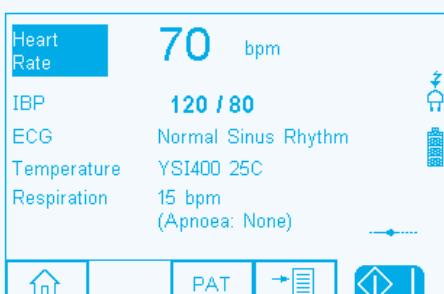
- PAT (F1) ECG, Respiration, Invasive Blood Pressure and Temperature
- SPO2 (F2) SPO2 Simulation
- NIBP (F3) NIBP Simulation and Measurements
- Menu (F4) allows for viewing and downloading data and other user settings

A small curve will display in the lower right corner of the screen indicating that the UNI-SIM is simulating

4 Perform Patient Simulation

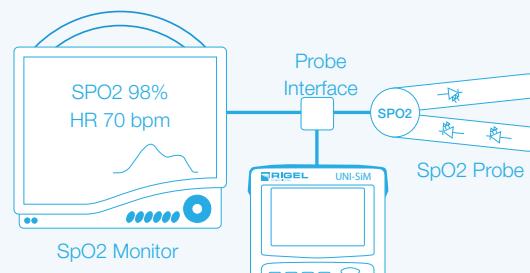
Connect the required adapters - ECG, IBP and Temperature and Respiration
Select the PAT (F1) from the main menu and then select the test: Patient Test Setting, Static IBP Test or Performance Wave

F3 allows you to toggle between the ECG, IBP and Temperature and Respiration during simulations



5 Perform SPO2 Simulation

Connect the compatible SP02 adapter box to the UNI-SIM and the monitor as shown in the diagram using the SP02 connector lead and then select SP02 from the main menu



Parameters can be varied to validate the monitor and probe including:

- Technology. E.g: Masimo, Nellcor....
- SPO2 (%) simulated
- Heart Rate
- Skin color
- Perfusion
- Red and Infared LED circuits

6 Perform NIBP Simulation

Connect required cuff and monitor using NIBP Tubing
Select NIBP from the main menu. The available test options include:

- NIBP Test Settings
- NIBP Leak Test
- NIBP Static Pressure Test
- Pop-off Test

The tests carried out for NIBP can check:

- Static Pressure (Leak Test, Linearity, Pop off Valves)
- Dynamic Pressure (Patient Simulation, Alarms)

