SimPad PLUS

User Guide

Laerdal
helping save lives

Intended Use

5.5.1. The SimPad PLUS System is an easy to use wireless tool that performs relevant medical simulation training, including debriefing, in various user settings. With a large, intuitive touch screen, SimPad PLUS is a "Pick up and Play" experience, delivering simulation-based education, easily and efficiently.

There are two ways to control simulations: Automatic Mode and Manual Mode. This allows customized simulations to meet specific needs.

The SimPad PLUS System is compatible with a broad range of Laerdal products including manikins, patient simulators, and task trainers as well as standardized patients.

This User Guide describes operating instructions for the following models:
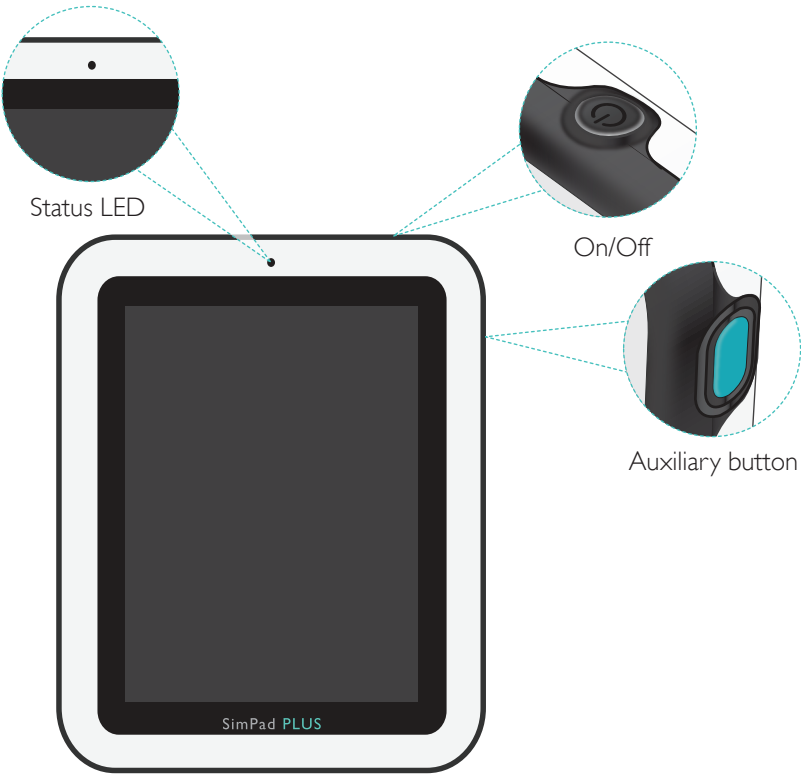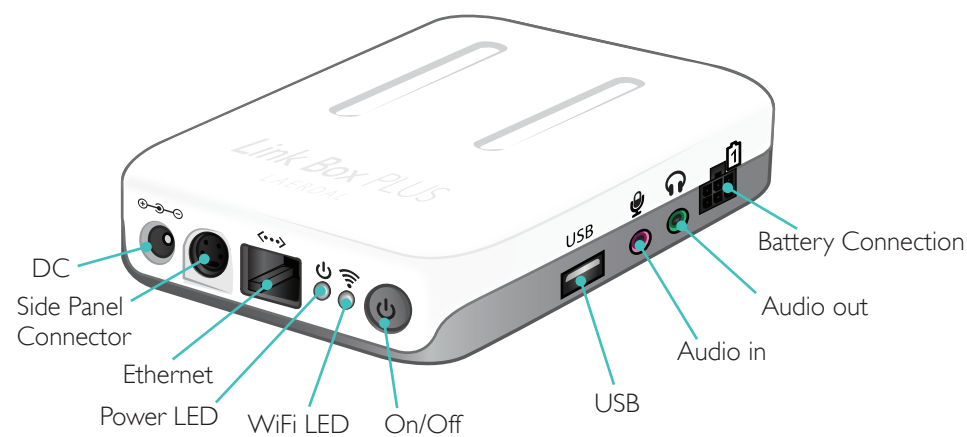- SimPad PLUS
- Link Box PLUS

 Notes

- *The products shown may vary in appearance and are subject to change.*
- *For further information and to access all product downloads visit www.laerdal.com/SimPad PLUS.*

Contents

SimPad PLUS Overview

Status LED

On/Off

Auxiliary button

SimPad PLUS

5.5.4.

DC

Ethernet

USB

Audio out

Front View

DC
Side Panel Connector
Ethernet
Power LED
WiFi LED
On/Off
USB
Audio in
Audio out
Battery Connection

Back View

Battery Connection
Manikin Cable
Blood Pressure Tube

SimPad PLUS Setup

Turn On

LED starts flashing

5.5.5

When charged, turn on by pressing On/Off button

A steady green indicates the device is ready to use

08:26 AM   50% 🔋 📶 🔋 50%

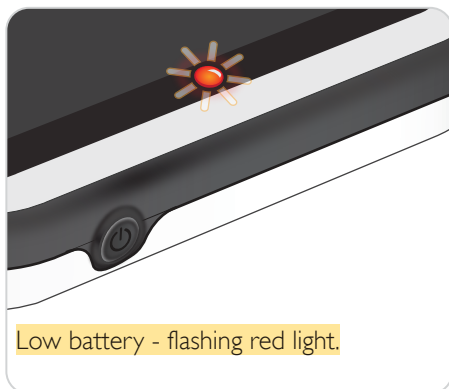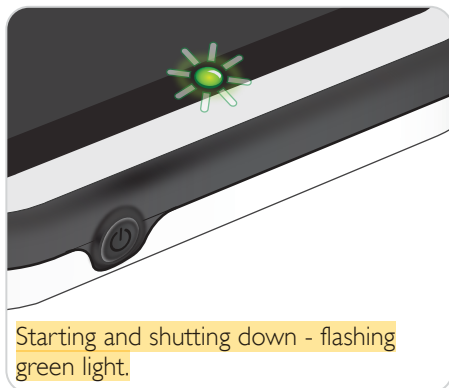What do you want to do?

Manual mode   Automatic mode   Log viewer

SimStore   System settings
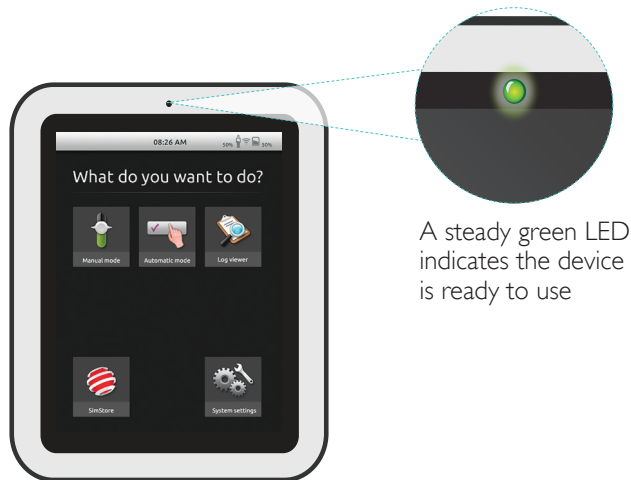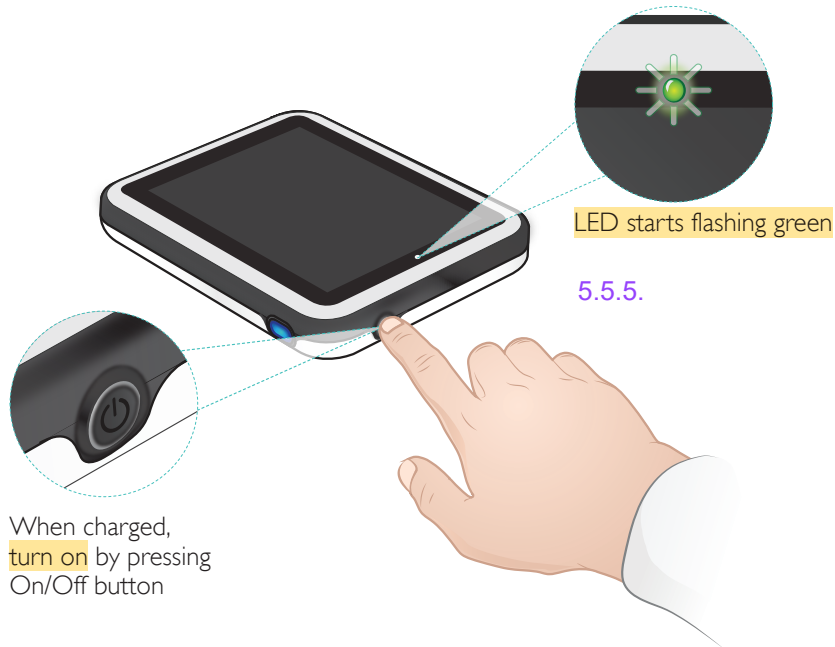
📝 Note

Make sure to use the SimPad PLUS charger.

5.5.5.

Off and charging battery - flashing yellow light.

Finished charging but SimPad PLUS application is off and charger is connected.

Starting and shutting down - flashing green light.

On - steady green light.

Low battery - flashing red light.

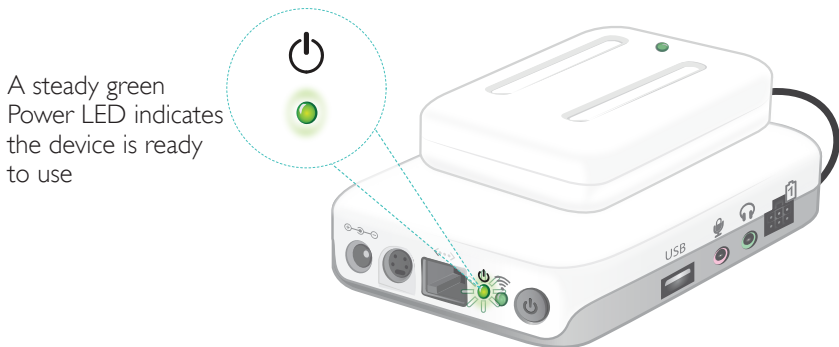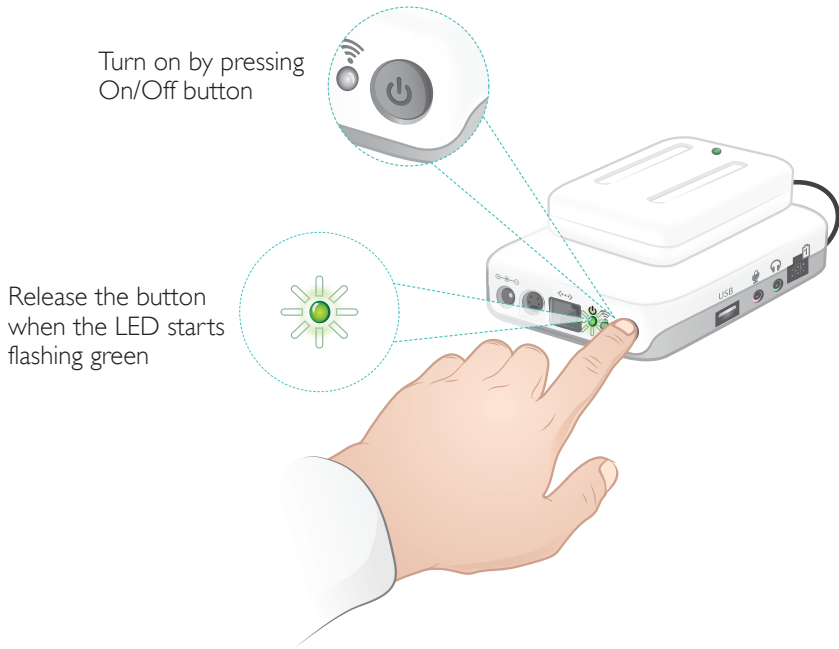Error, needs service - steady red light.
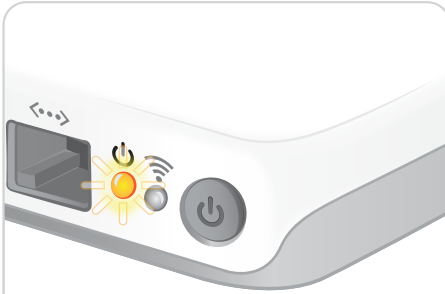Contact your local Laerdal representative.
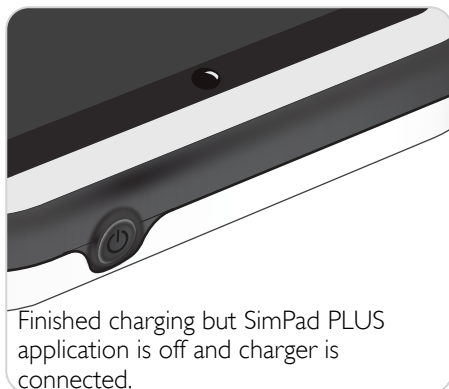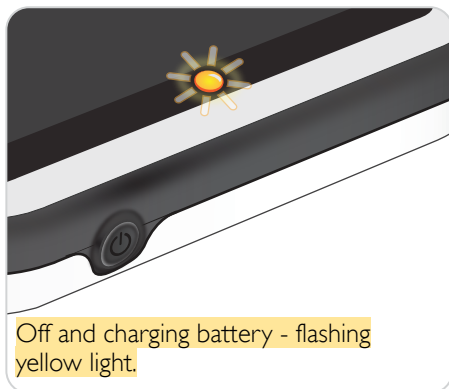
Link Box PLUS Setup

Turn On

Link Box PLUS can be located on the inside or the outside for the simulator. This illustration is of the simulators with the Link Box PLUS on the outside

Turn on by pressing On/Off button

Release the button when the LED starts flashing green

A steady green Power LED indicates the device is ready to use

Status Power LED

Charger connected but Link Box PLUS is turned off

Batteries charged - steady yellow light.

Starting and shutting down - flashing green light.

On - steady green light.

Error, needs service - steady red light. Contact your local Laerdal representative.

SimPad PLUS Setup

Starting for the First Time

Follow the on-screen prompts to configure the device.

Select language

Choose country

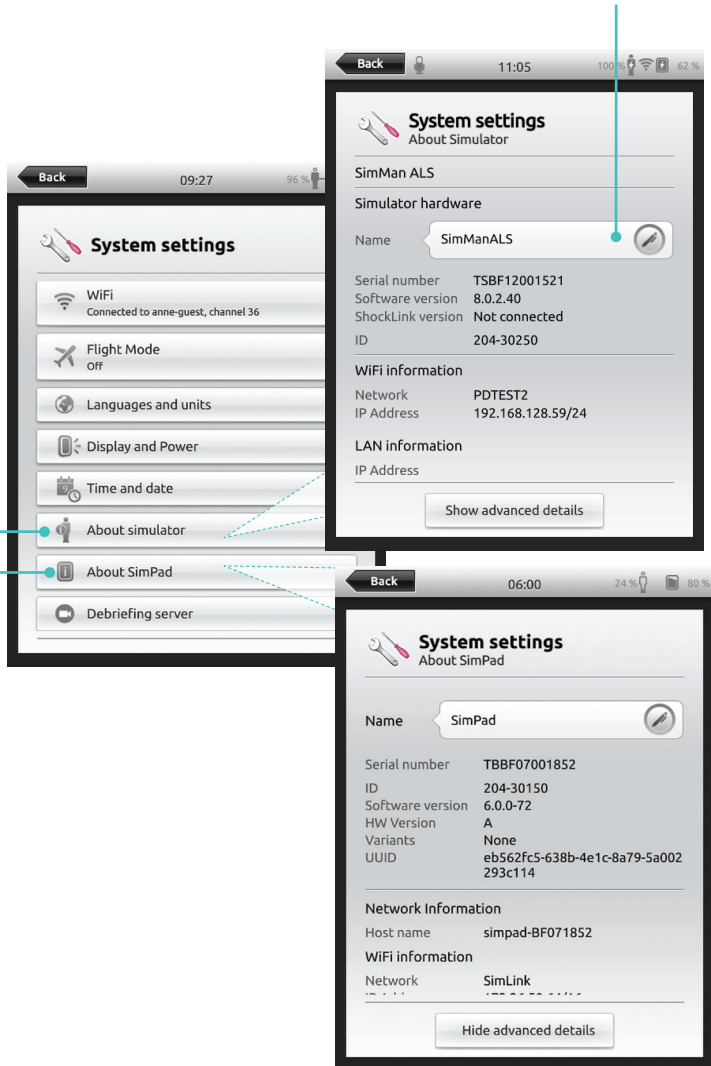Enter a name for the SimPad PLUS (Optional)

Configuration

Connect the simulator to the SimPad PLUS before configuration.

Enter a name for the Link Box PLUS (optional)

About Simulator

About SimPad

SimPad PLUS Setup
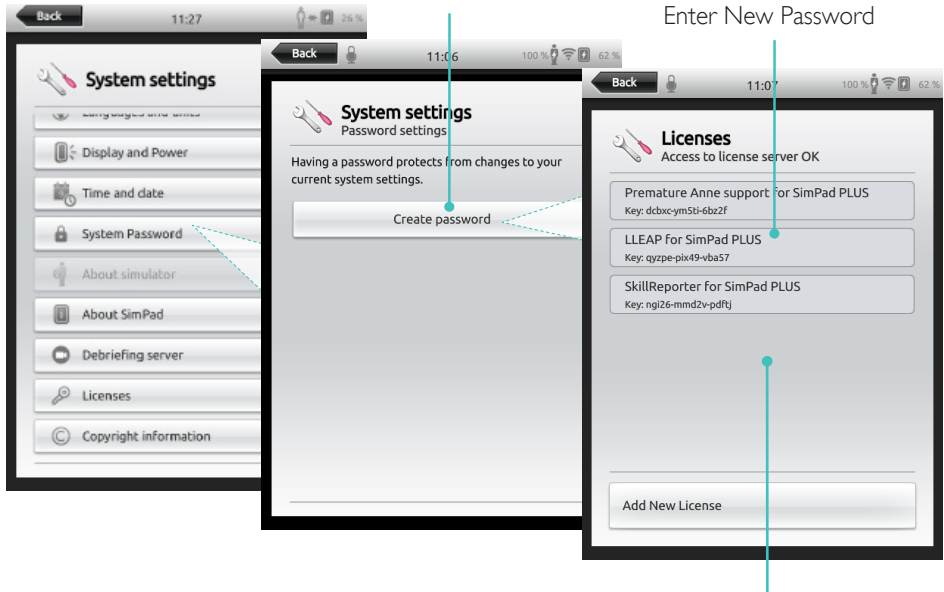
Setting Up A Password

📝 Note

Creating a new password will make future changes in System Settings require password authentication.

Select Create password

Enter New Password
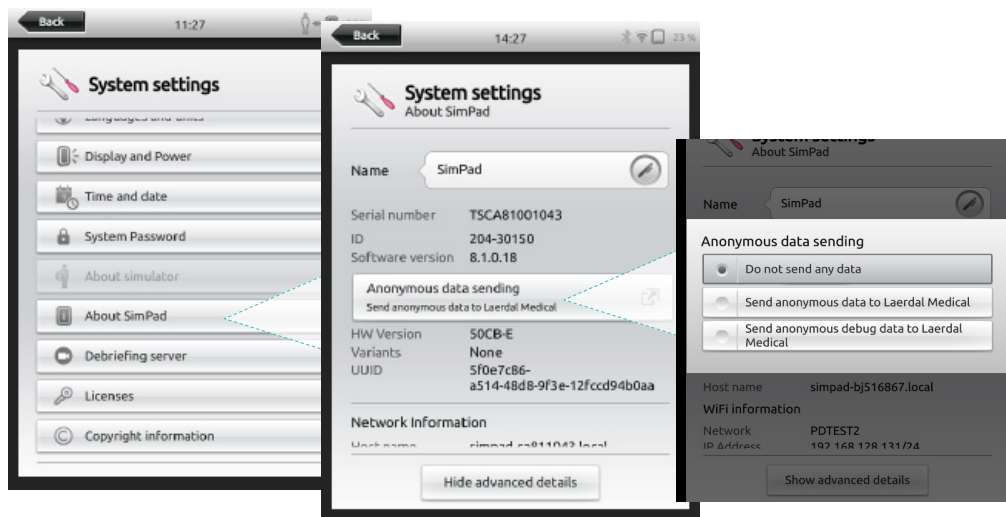

Select Submit

Password Reset

📝 Note

To reset the password, the SimPad PLUS must be sent to Laerdal Technical Center.
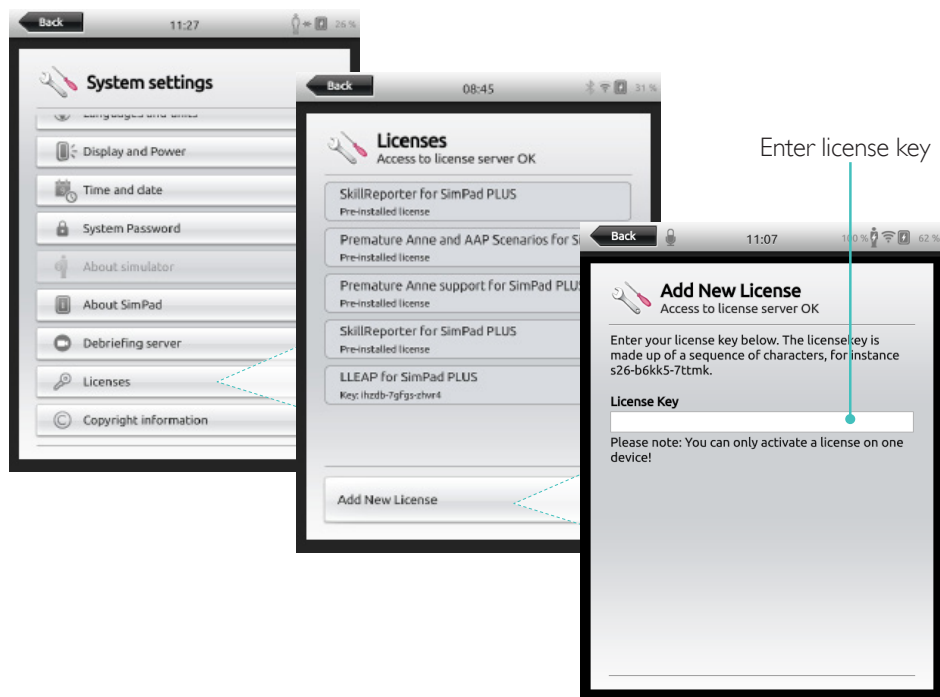
Anonymous Data Collection

Non-personal usage data can automatically be sent to Laerdal. When first turned on, the SimPad PLUS asks permission to share those data.. The setting can later be changed in the System settings.
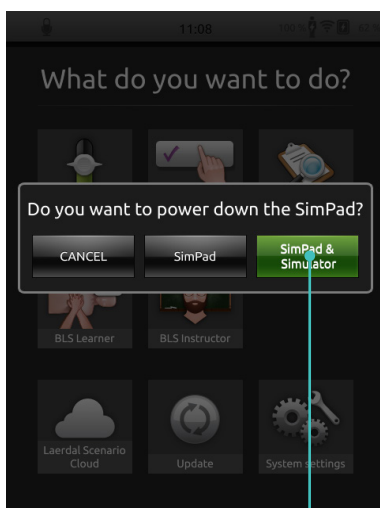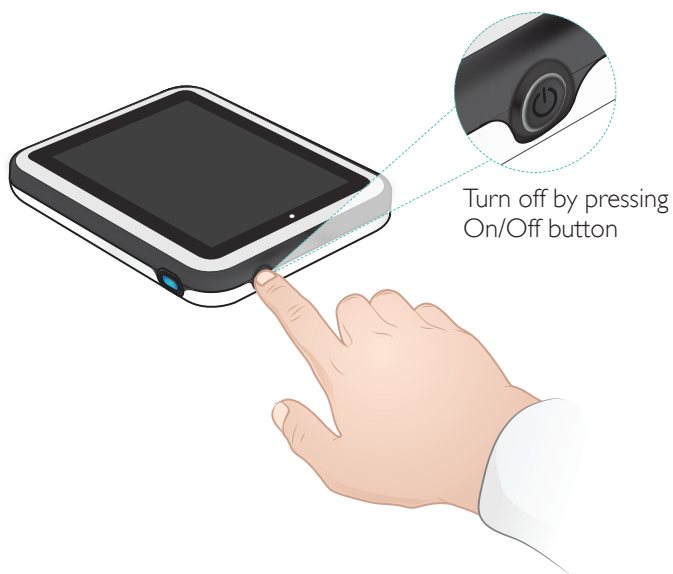
SimPad PLUS Setup

Add a New License

Enter license key

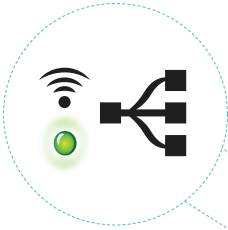## Turn Off

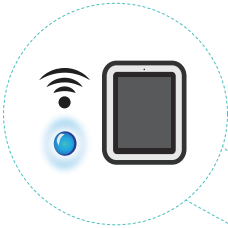Turn off by pressing
On/Off button

Tap to shutdown SimPad PLUS
and/or Simulator

Link Box PLUS Setup

WiFi Connection

Connected to a network -
steady green light

Connected to a SimPad PLUS
(or another instructor device) -
steady blue light
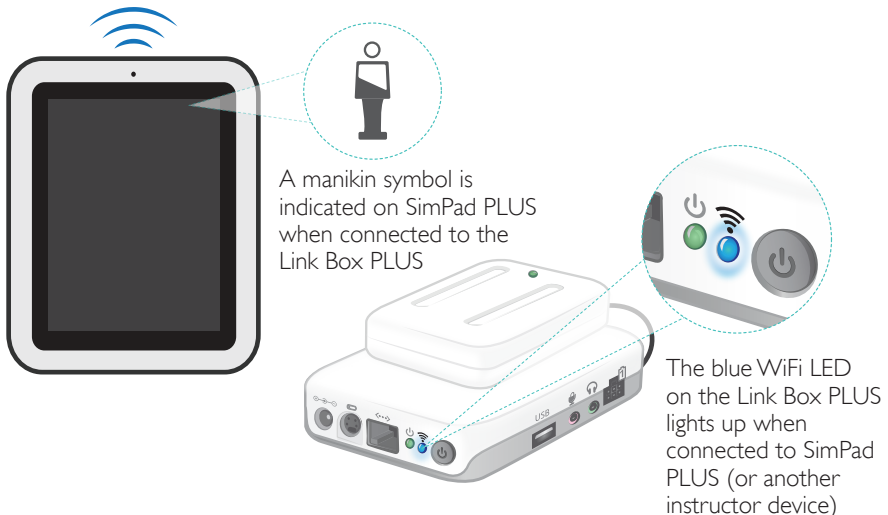
Connection between SimPad PLUS and Simulator
SimPad PLUS communicates with the Link Box PLUS using WiFi.

Select the WiFi network

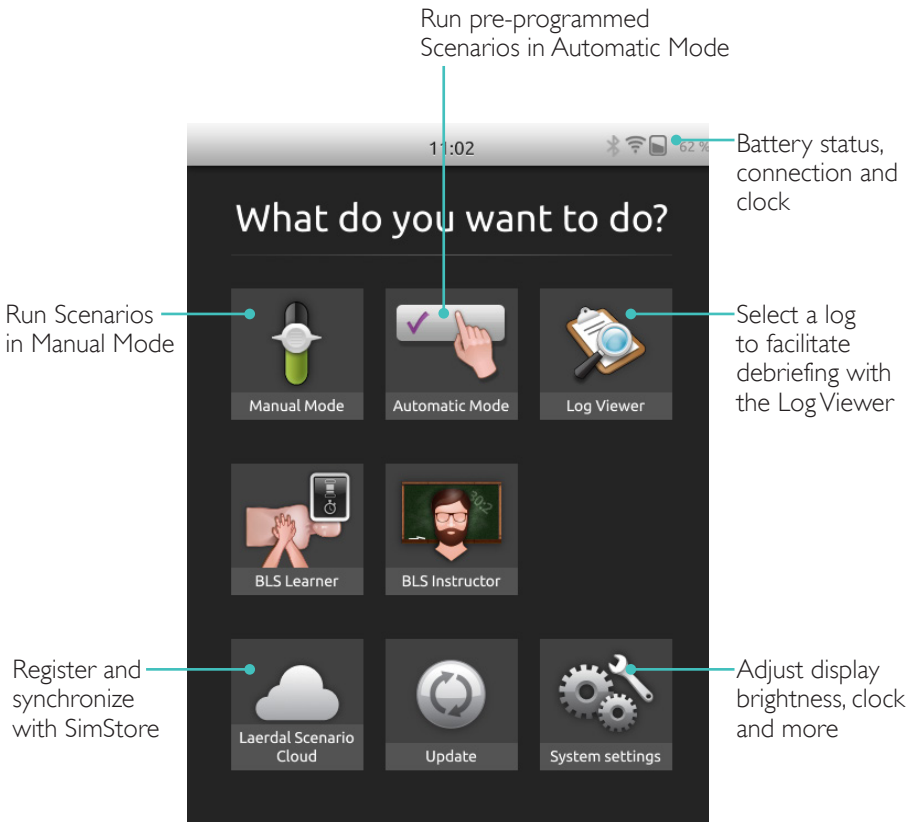Select SimLink Network

Select the Simulator

📝 Note
When both devices are turned on for the first time, they connect to an ad hoc network. This pairing is remembered and the units will reconnect when turned on again. When multiple Link Box/Simulator are available, choose the preferred option.

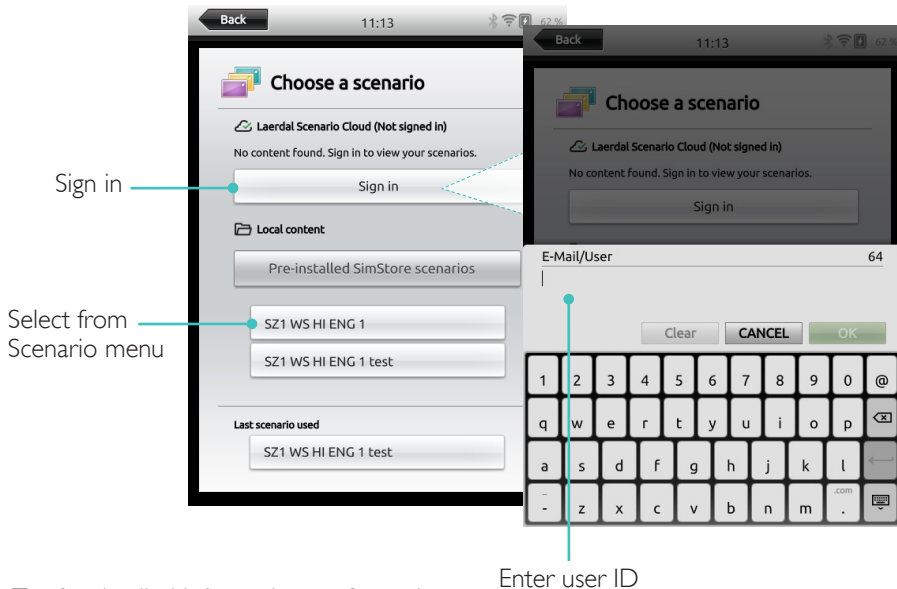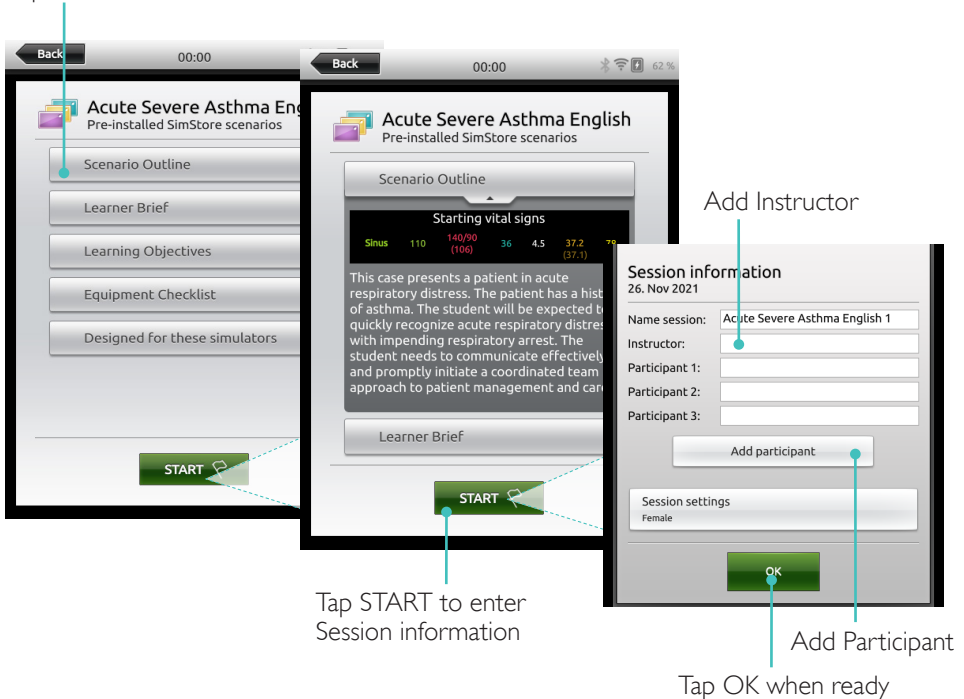This is what the system will look like when connection to simulator is established.

A manikin symbol is indicated on SimPad PLUS when connected to the Link Box PLUS

The blue WiFi LED on the Link Box PLUS lights up when connected to SimPad PLUS (or another instructor device)

Home Screen Overview

Run pre-programmed
Scenarios in Automatic Mode

Battery status,
connection and
clock

What do you want to do?

11:02

Run Scenarios
in Manual Mode

Manual Mode

Automatic Mode

Log Viewer

Select a log
to facilitate
debriefing with
the Log Viewer

BLS Learner

BLS Instructor

Register and
synchronize
with SimStore

Laerdal Scenario
Cloud

Update

System settings

Adjust display
brightness, clock
and more

Note

Home screen may vary in appearance based on purchased licenses.

Select Scenario

Sign in

Select from
Scenario menu

Enter user ID

Tap for detailed information on Scenario

Add Instructor

Add Participant

Tap OK when ready

Tap START to enter
Session information

Automatic Mode

Run Session

Time since Scenario was started

Patient status

Categories of interventions

Tap to log interventions and events

Last logged event

Tap to add comment

Menu 00:25 100 %

Sinus HR 110 | 140/90 (106) | RR 36 | etCO₂ 34 | 37.2 (37.1) | SpO₂ 78

Respiratory distress; The patient arrives to the Emergency Department in acute respiratory distress.

On entrance | Assessment | Monitoring per orders | Treatm

Correct treatment | Related events

Wash hands — 1 | Communicate with patient — 1

Identify patient — 0 | Comfort patient — 1

Introduce self — 1 | Communicate clearly — 0

| Communicate effectively — 0

00:20 **Communicate with patient**

Override Pre-programmed Behaviour
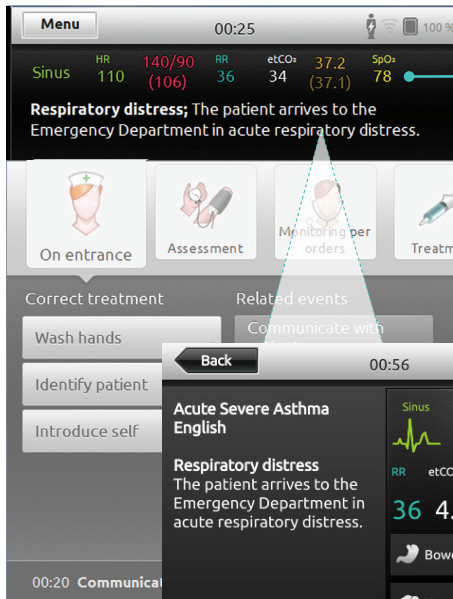
Tap here to display more patient state information
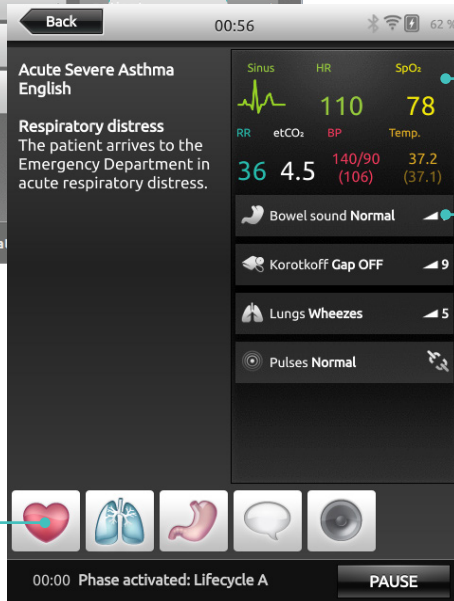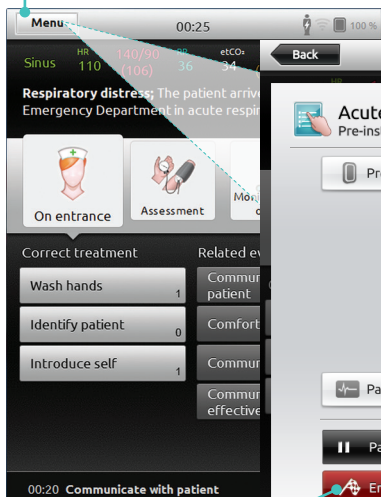
Access to vital signs adjustments

Abnormal parameter values displayed here
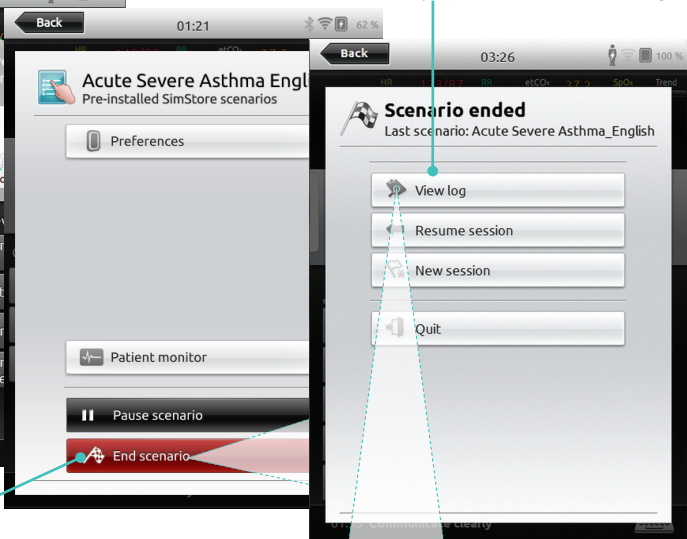
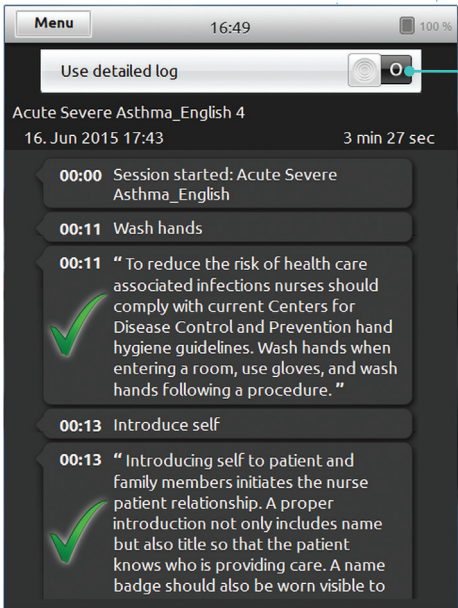Select other parameters to adjust

Automatic Mode

End Session

Tap menu to End Session

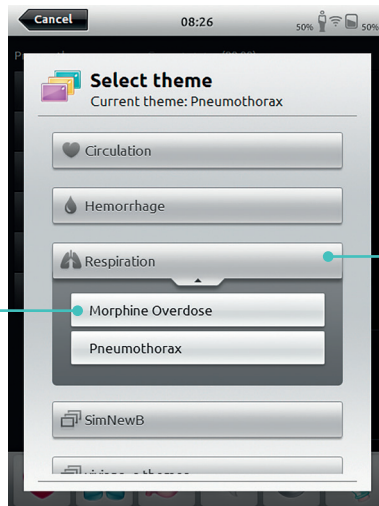Open current Session log

End Scenario

Display more or less information

Select Theme   5.5.2.
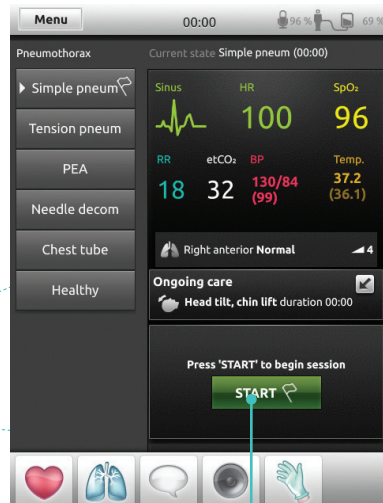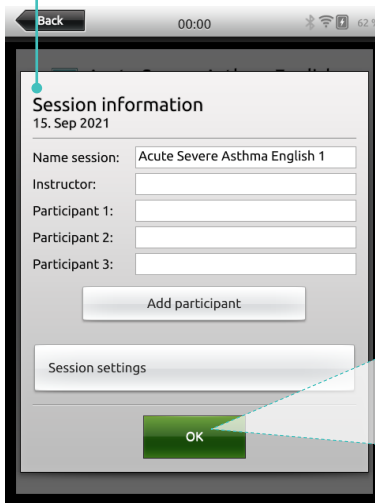

Folder of themes
Tap to open

Select theme
for simulation

Information about Session entered
here will be added to log

Tap to start Session

Manual Mode

Change Parameters 5.5.2.

Current state

States

Flag indicates
start state

Pneumothorax

▸ Simple pneum

Tension pneum

White arrow indicates
last activated state

Select other parameters to adjust

Time since current
state was activated

Patient vital signs

Abnormal values

Collapse mini-log

End Session

Register participant's
interventions

Pause Session

Toggle On/Off shock activation

Time since
Session started

Tap to
open State

Tap to show
detailed State
information,
before activating

Set transition time

The expanded
state shows all
parameters in the
queue, ready to be
activated

Tap to
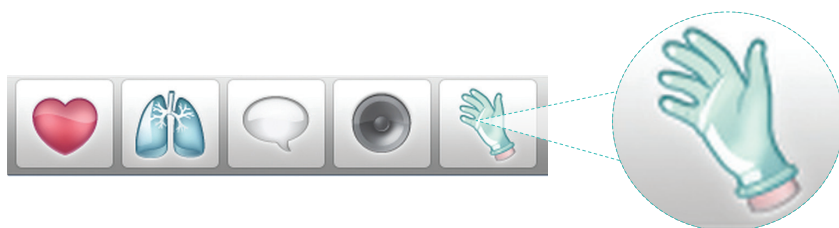activate State

Registering Interventions

Tap to register participant's interventions

Time since Scenario was started

Patient status

Tap to log interventions and events

Categories of interventions

Last logged event

Tap to add comment

Manual Mode

Create New State for an Existing Theme
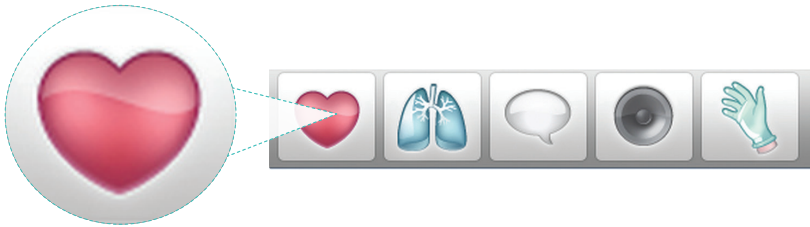
Tap to access Circulation Menu

Select desired parameter

New state visible

Tap to create a new state
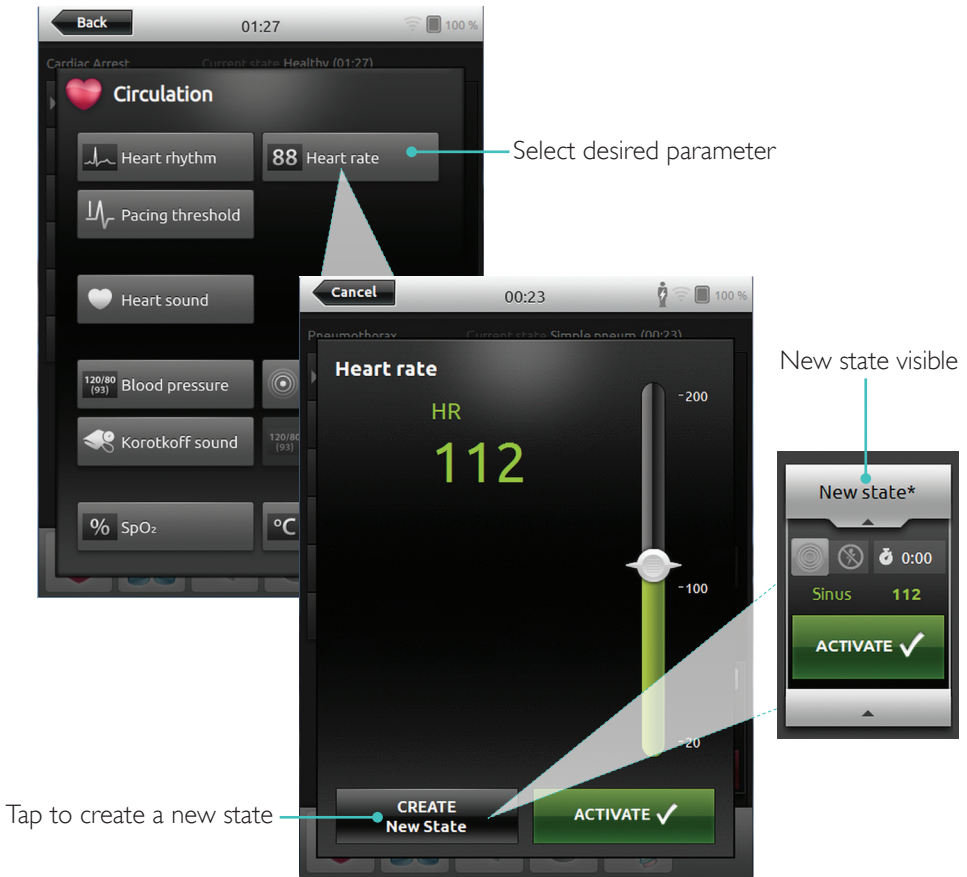
Adjust Parameters Manually

Tap to adjust values (e.g. respiration rate)

For fine adjustments, hold finger over slider

Drag to adjust parameters

Activate the new value
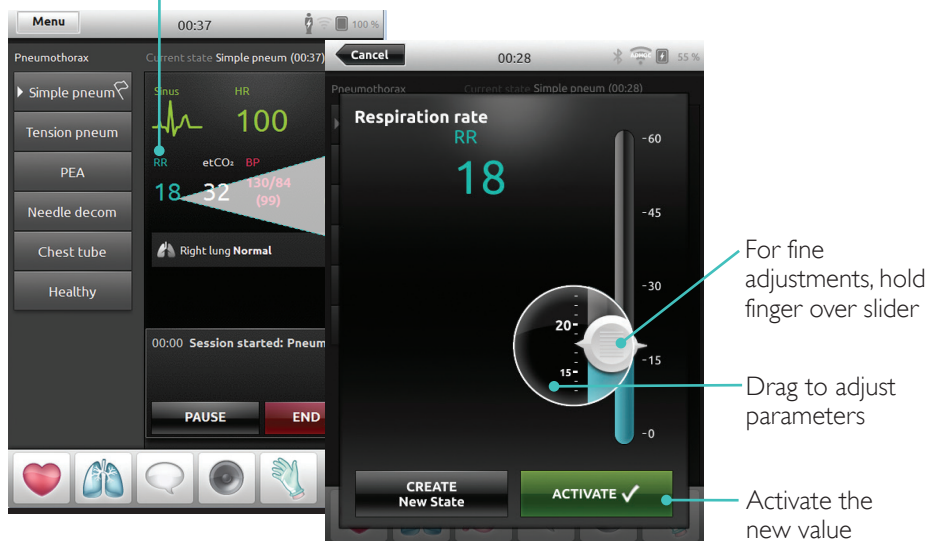
Advanced Adjustments

Tap to set desired condition
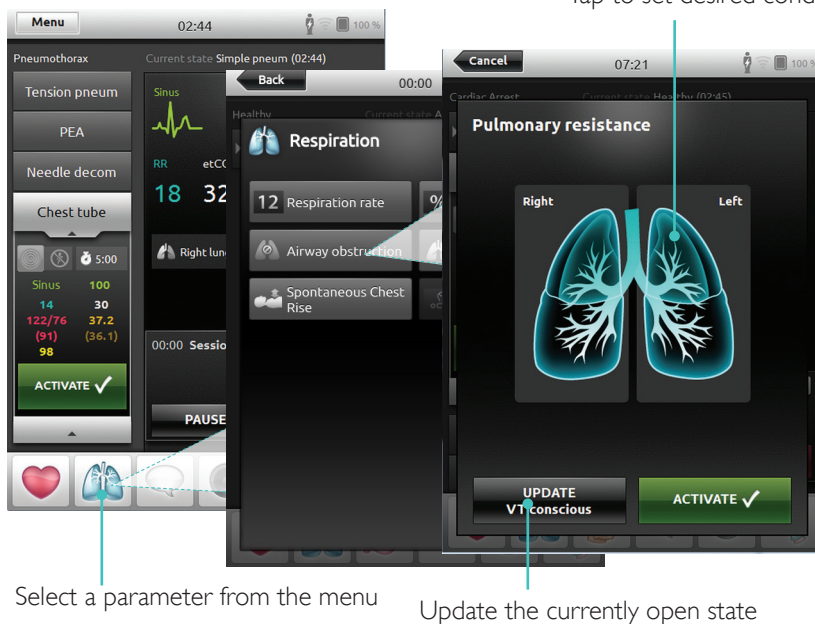
Select a parameter from the menu

Update the currently open state

Manual Mode

Add New State to an Existing Theme

Tap to add new state to theme
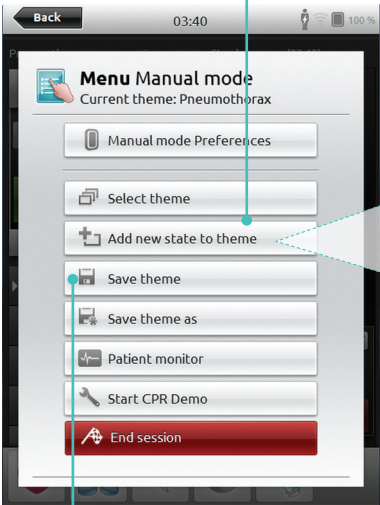
Enter new state name
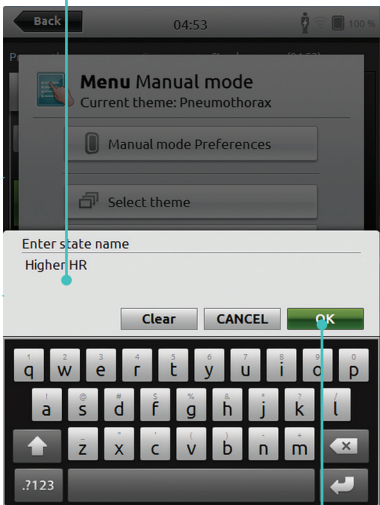
Tap to save state to theme
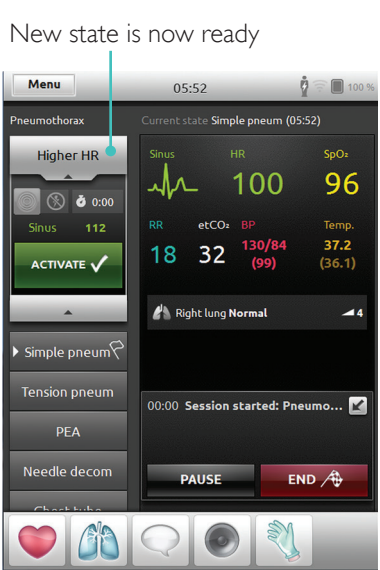
Confirm

New state is now ready

Tap and hold to arrange states
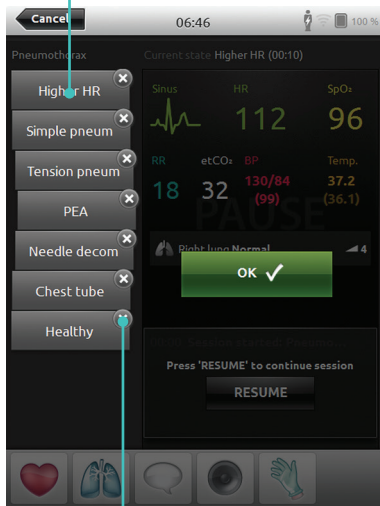
Tap x to delete

Stopwatch

Tap to display and activate the Stopwatch

Manual Mode

View Log

Go to Log Viewer

Continue session

Tap to select
new session

Toggle On/Off to
view detailed log

Back to home screen
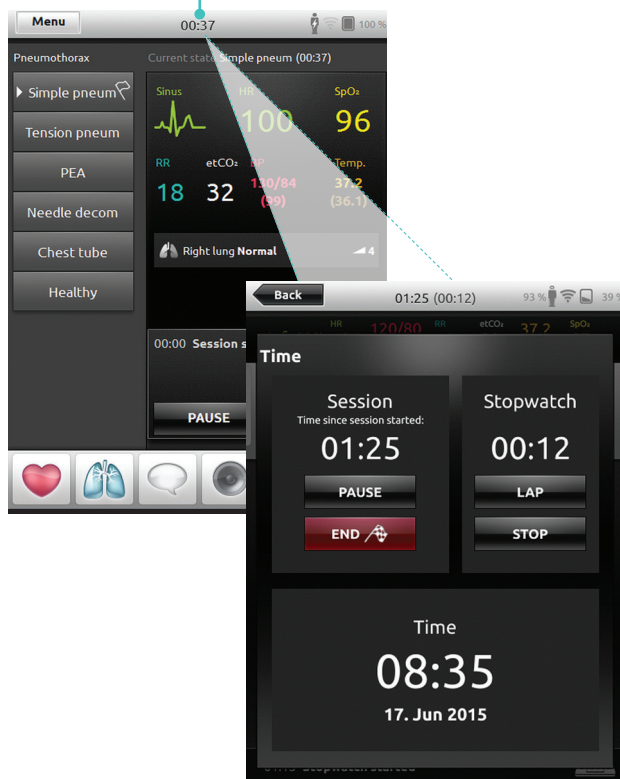
QCPR Feedback

When CPR is performed on a CPR capable manikin, SimPad PLUS displays real time CPR feedback.

Automatic Mode -
Tap to enlarge QCPR feedback
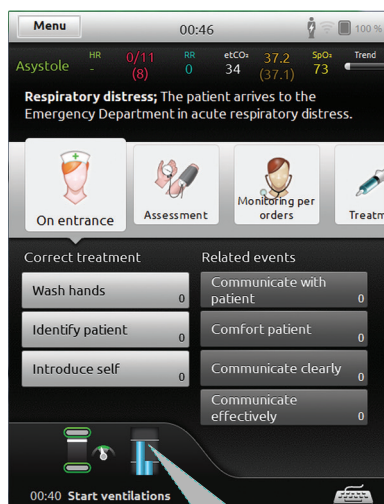
Manual Mode -
Tap to enlarge QCPR feedback

Chest release

Compression depth

Full Session, with compressions and ventilations over time.
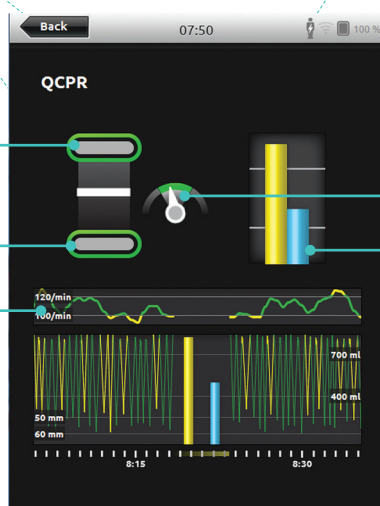
Compression rate

Ventilation volume

QCPR

QCPR Log File

Debriefing mode provides an additional log file with data from CPR training.

Tap to access log
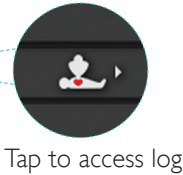
Indicates two main findings from the CPR performance

QCPR Summary

Single Rescuer

♥ 92% — Compression score
🫁 94% — Ventilation score
⬇ 47% — Flow fraction

Total time of this session | **Number of cycles**
🕐 11:46 | 👥 29
⬇ 12 sec | ⊕ 97%

Mean no flow time | **Compressions with correct hand position**

Back — 19:19 — 🔋 100 %

♥ 92%
🫁 94%
⬇ 47%

🕐 11:46 | 👥
⬇ 12 sec | ⊕ 97%

868 Compressions
Mean depth: 52 mm
100% | 69%
66% | 109/min

57 Ventilations
Mean volume: 557 ml
23%
72%
5% | 5/min

120/min
100/min

700 ml
400 ml

50 mm
60 mm

5:00 — 10:00

Less Details

868 Compressions
Mean depth: 52 mm

Compressions fully released | 100% | 69% | Compression with adequate rate
Deep enough compressions | 66% | 109/min | Mean rate of all compression during this session

57 Ventilations
Mean volume: 557 ml

Ventilations exceeding the maximum volume limit | 23%
Ventilations with adequate volume | 72%
Ventilations not reaching the minimum volume limit | 5% | 5/min | Mean rate of all vent. during this session

For more information about QCPR scoring, visit www.laerdal.com/no/support/cpr-scoring/

Compression Analysis Over Time

CPR settings can be adjusted to individual needs. Laerdal recommends using settings compliant with ILCOR guidelines.

Display Choices
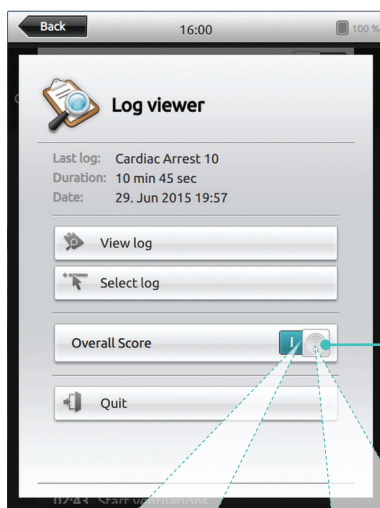
Toggle between displays (only available on CPR score sessions)

With overall score
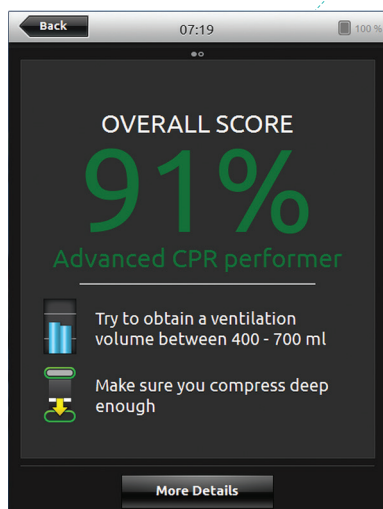
Without overall score
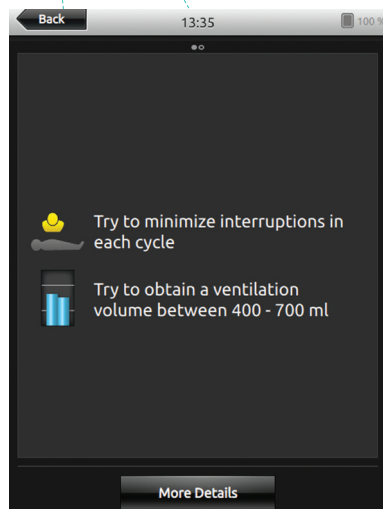
Simulated Patient Monitor

Connect a <mark>Simulated Patient Monitor</mark>   5.7.1

Ensure the Simulated Patient Monitor PC and the SimPad PLUS System are connected to the same network. Using a direct network cable to connect the Link Box PLUS to the Simulated Patient Monitor is recommended to minimize WiFi traffic.

📝 Note

Refer to Network section for more information about other network connections.
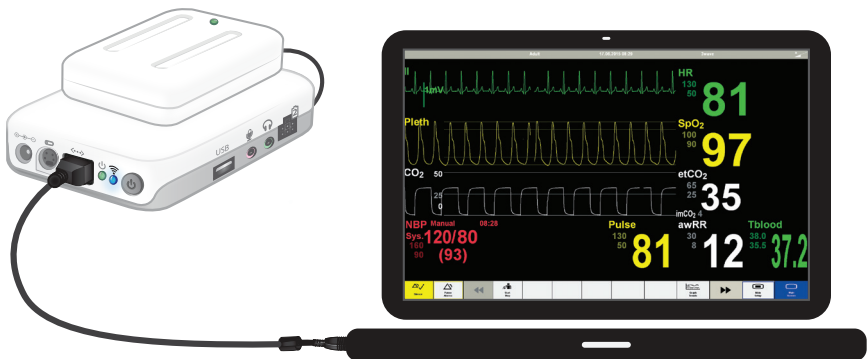
Instructor Control of Simulated Patient Monitor (optional item)

When the Simulated Patient Monitor is connected to SimPad PLUS, the instructor can toggle the display of vital signs. Navigate to Manual Mode and select Patient Monitor.
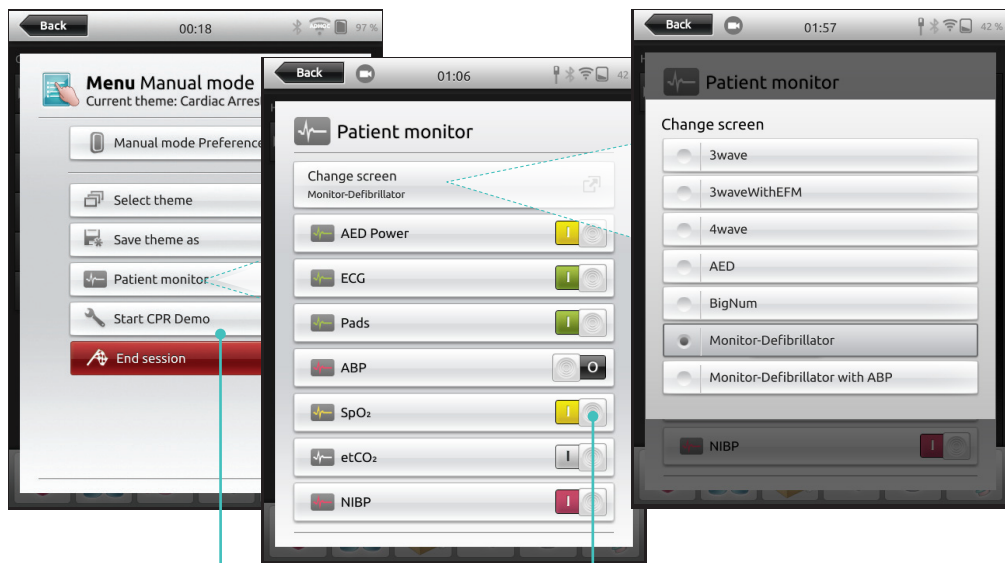
Navigate to Menu and select Patient Monitor

Toggle On/Off vital signs

Select Cut Off limits

Simulated Patient Monitor

Patient Simulator Firmware Update

When Link Box PLUS is connected to a Patient Simulator with internal firmware it will be automatically updated, if necessary.

If an automatic update is interrupted, a forced update is necessary.

From Home Screen, go to:
System Settings>About simulator>Force-update simulator firmware.

⚠ Caution

Ensure that the correct Simulator is selected. Selecting the wrong simulator may cause malfunction and require service.

Session Viewer

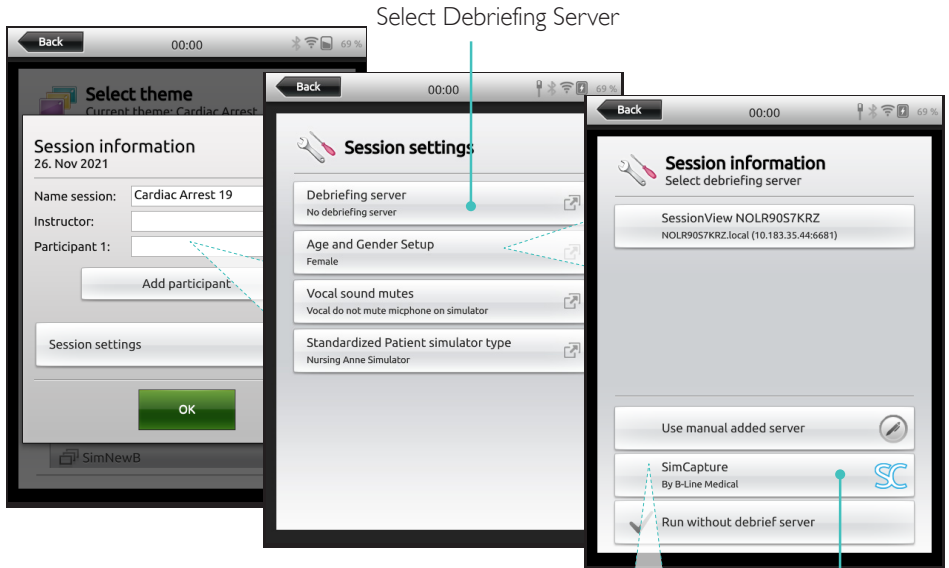Session Viewer is a free software solution that enables instructors or students to view debriefing from the SimPad PLUS System. Use Session Viewer to annotate, print and save the SimPad PLUS data log. Session Viewer also enables capture of audio and video from 1 HD USB web camera synchronized with the SimPad PLUS data log.
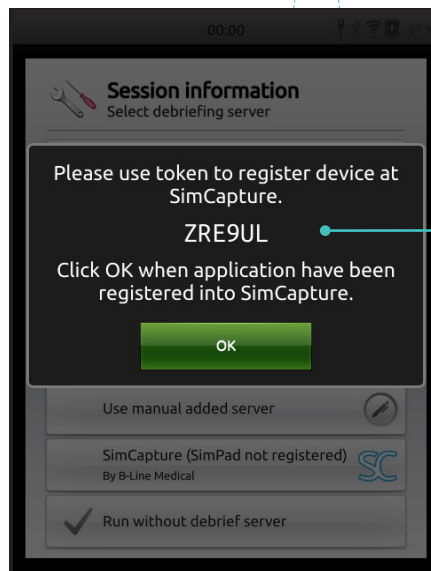
To download, visit www.laerdal.com/downloads

First Time Registration and Use
Check that both SimPad PLUS and Simulator are connected to the same steady network.

Select Debriefing Server

Back   00:00   69 %

Select theme
Current theme: Cardiac Arrest

Session information
26. Nov 2021

Name session: Cardiac Arrest 19
Instructor:
Participant 1:

Add participant

Session settings

OK

SimNewB

Back   00:00   69 %

Session settings

Debriefing server
No debriefing server

Age and Gender Setup
Female

Vocal sound mutes
Vocal do not mute micphone on simulator

Standardized Patient simulator type
Nursing Anne Simulator

Back   00:00   69 %

Session information
Select debriefing server

SessionView NOLR90S7KRZ
NOLR90S7KRZ.local (10.183.35.44:6681)

Use manual added server

SimCapture
By B-Line Medical

Run without debrief server

Select SimCapture

00:00   69 %

Session information
Select debriefing server

Please use token to register device at SimCapture.

ZRE9UL

Click OK when application have been registered into SimCapture.

OK

Use manual added server

SimCapture (SimPad not registered)
By B-Line Medical

Run without debrief server

Note the code and login to Simcapture on a PC

SimCapture Setup

Before registering to SimCapture check that the SimPad PLUS is set up to the correct region.