SimPad with SkillReporter

User Guide

What do you want to do?

- BLS Learner
- BLS Instructor
- SimStore
- System settings

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Intended Use

This version of SimPad is installed with SkillReporter software for Basic Life Support (BLS) training. For feedback on CPR performance, use QCPR enabled manikins, such as Resusci Anne or Resusci Baby with QCPR.

For more information visit www.laerdal.com/SimPad-SkillReporter

Important Information

Read this User Guide and become familiar with the operation of the product prior to use.

This User Guide describes operating instructions for the following models:
• SimPad
• SimPad PLUS

SimPad when used throughout this User Guide, applies also to SimPad PLUS model, unless otherwise specified.

Items included may vary in appearance and are subject to change.
Items Included

- SimPad/SimPad PLUS
- Sleeve
- USB cable
- Wrist Strap
- Power Cord
- AC Adapter Power Supply
- User Guide
- Important Product Information (IPI)
SimPad Overview

Status LED
On/Off
Auxiliary button
DC
Ethernet
USB
Audio out
SimPad PLUS Overview

Status LED

On/Off

Auxiliary button

DC

Ethernet

USB

Audio out
Connect SimPad to the AC adapter and plug it into a wall outlet.

- **Flashing yellow light - battery charging**
- **Steady yellow light - battery charged**
Setup

Turn On/Off

LED starts flashing green

When charged, turn on by pressing On/Off button

A steady green light indicates the device is ready to use

Note

Ensure that the SimPad SkillReporter software and Resusci Anne QCPR manikin software is the most up to date version. Latest versions of all software and product downloads are available from the Download section of the product page www.laerdal.com/SimPad-SkillReporter.
Setup

Status LED

Off and charging battery - flashing yellow light.

Off but battery charged - steady yellow light.

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.
Connect To One Manikin Using USB Cable

The USB cable provides the most reliable connection when connecting SimPad to one manikin. When using the USB cable, the manikin is powered by SimPad. Use the power adaptor to avoid quick battery discharge when the manikin is powered by SimPad.

Connect To One Manikin Using WiFi

For wireless use, make sure the manikin is in WiFi mode, indicated by the green WiFi symbol on the manikin’s control panel. Use the toggle button to select between cable, WiFi or Bluetooth mode.
Manikin Setup

Connecting Multiple Manikins

In BLS Instructor Mode multiple manikins can be connected. When operating multiple manikins (2-6) it is recommended to use a router (Multi Manikin Router).

Note

In BLS Learner mode only one manikin can be selected. This happens automatically if the manikin is connected through the USB cable, or if only one manikin is available.

Multi Manikin Router Setup

It is recommended to use the Laerdal Router (purchased separately) to establish network. Start up the router completely (approx. 2 minutes) before starting up SimPad and manikins.

To power the router, use the included USB power supply (5V)*

Router switch (set to Router or AP, not Client)

Power connector

Reset button (do not use)

For optimal performance, place the router above floor level.

To reboot, disconnect the power supply for at least 30 seconds, then reconnect.

Note

Do not reset or change the router (i.e. password, configuration etc).
Edit Manikin Name

When using manikin for the first time, it will have a default name (e.g. Resusci Anne QCPR). To keep track of multiple manikins, label each with a unique name. This name will be used to identify the manikin in the BLS Instructor Mode.

1. Turn on the Manikin (ensure it is in WiFi mode)
2. Turn on SimPad
3. Select BLS Instructor Mode
Manikin Setup

4

Press Start Session

5

Select the manikin that appears on the screen (this should be the one that is turned on)

Edit name to match the physical name given earlier

6

Turn off the Manikin (repeat procedure for every new manikin)
Select Manikins

If more than one manikin is selected, a prompt will appear to choose a network. The network enables communication between several manikins and SimPad.

Select Network

Tap manikin to access the manikin selection and available networks

Number of manikins connected

Selected
Connected
Occupied (in use by another SimPad)
Lost Connection

Tap to select Network

Missing a manikin?
Cancel
Continue
Manikin Settings

Manikin Information

For detailed information about the manikin, tap and hold (2 seconds) on one of the connected manikins. Toggle between manikin status, manikin serial number, manikin software version, and number of compressions performed on that manikin during its lifetime.

Tap and hold for 2 seconds to toggle between states.
SkillReporter has two modes, BLS Learner and BLS Instructor

BLS Learner gives feedback on CPR performed on a single manikin.

BLS Instructor enables the instructor to:
• Monitor CPR feedback on up to 6 manikins
• Register events with a single manikin
• Control and monitor AED (Automated External Defibrillator) training (single manikin)
• Monitor and debrief on CPR-D/ShockLink training (single manikin)
BLS Learner Mode

BLS Learner gives feedback on CPR performance for learners using a single manikin. Choose between Practice and Assessment, and between CPR (single rescuer or two-rescuer), Compressions Only and Ventilations Only.
BLS Instructor helps the instructor review learners’ performance on one or several manikins, register events, and control defibrillation features (depending on manikin model). Sessions can be saved and features for managing learners are available.

Note

*BLS Instructor can only monitor and provide feedback for AED and training with ShockLink on one manikin at a time.*
BLS Instructor Mode

Choose Algorithm

Practice CPR, Compressions only or Ventilations only. For CPR sessions, select either single rescuer or two-rescuer. Participants in two-rescuer sessions are allowed less no flow time than single rescuers.

Assign one or more learner names to each manikin. Tap Learners and assign names either before, during, or after a session. These will be stored for later reference. View and edit the Learners list in BLS Settings.
Learner Administration

To manage a large group of learners, import a list of names to SimPad. Connect SimPad to a computer, using the USB cable. SimPad appears as an external disk drive.

Create a document in “.txt” format named “class.txt” (e.g. in Notepad) that has one learner name per line. Transfer the file into the folder named “Learners” on the SimPad drive.
BLS Instructor Mode

Event Registration

Register Events including Response Check and Call for Help during a session. These events are displayed in the timeline and stored in the session.

Customised Events

Create customised events from BLS Settings > View Event Registrations. The Event Registration feature can be disabled in BLS Settings.

Note

Event registration is only available with a 1:1 connection.
Defibrillator Features

Defibrillation training with live defibrillators (manual and automatic) can be monitored by SimPad with SkillReporter. Training can be performed in 3 ways:

- ShockLink with Resusci Anne AED Manikin
- Resusci Anne QCPR D
- AED Trainer 2 and AED Trainer 3

Defibrillation with ShockLink or Resusci Anne QCPR D

ShockLink enables the connection of compatible live defibrillators to ShockLink prepared training manikins and Patient Simulators. For more information about ShockLink visit www.laerdal.com/ShockLink.
BLS Instructor Mode

AED Trainer 2 and AED Trainer 3

Enable this feature in BLS settings by selecting the AED Trainer type. After correct training pad placement, SimPad can be used as a remote control for the AED trainer.
SkillReporter displays real time CPR feedback

Compression Depth

- Adequate release
- Adequate depth

Compression Rate

- Adequate rate
- Too slow
- Too fast
QCPR Feedback

Ventilation Volume

![Adequate](image1) ![Too little](image2) ![Too much](image3)

Ventilation Rate

![Adequate](image1) ![Too slow](image2) ![Too fast](image3)

Results

The initial result screen gives an overall score (if enabled in Settings) and advice on how to improve CPR performance.

![Overall Score](image4)

Tap or swipe screen for more details

Indicates two main findings from the CPR performance
QCPR Feedback

QCPR Summary
Tap or swipe screen for more details

Overall score based on compressions, ventilations and flow fraction

96%
95%
72%

Single Rescuer

76.100 % Advanced CPR performer
50-74 % Intermediate CPR performer
0-49 % Basic CPR performer

Compressions score
Ventilation score
Flow fraction

Total time of this session: 2:00
Number of cycles: 4
Mean no flow time: 8 sec
Compressions with correct hand position: 100%

Result

72 Compressions
Mean depth: 60 mm
97%
100%
107/min

4 Ventilations
Mean volume: 430 ml
0%
50%
50%
4/min

120/min
100/min
10 sec
100%

147 Compressions
Mean depth: 57 mm
100%
84%
83%
102/min

Compressions fully released
Compression with adequate rate
Deep enough compressions

8 Ventilations
Mean volume: 454 ml

Ventilations exceeding the maximum volume limit: 0%
Ventilations with adequate volume: 75%
Ventilations not reaching the minimum volume limit: 25%
Mean rate of all vent. during this session: 4/min

For more details on the scoring, visit www.laerdal.com/qcpr.
QCPR Feedback

Timeline
Performance data for the previous 30 seconds is displayed in the timeline.

When doing a Ventilations Only session, the ventilation rate curve is displayed instead of the compression rate curve. Events and AED activity are viewed in the timeline.
Flow Fraction is not included in the overall score for Scenario training with AED or when events are registered (Response Check, Check Breathing, etc.). This is to allow for correct medical procedures, without having the overall score reduced. The Flow Fraction is then shown separately.
BLS Settings

BLS Settings Menu

In the BLS Settings Menu, select predefined CPR Guidelines (European Resuscitation Council (ERC) and American Heart Association (AHA)), or specify custom thresholds and other settings.

Select predefined CPR Guidelines

Create customised thresholds
## Troubleshooting

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<th>Solution</th>
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| Manikin is not connecting. It might take up to 15 seconds to identify the manikin. If it does not appear on the list, try the following solutions. | • Ensure the manikin is switched on and in WiFi mode, indicated by the green WiFi symbol on the control panel on the manikin.  
• It may be connected to a network other than SimPad. To make it available for selection, press and hold the manikin’s toggle button. After two seconds a beep confirms that the manikin is reset. |
| Connection problems may occur in areas with a high WiFi traffic. | • To avoid high traffic WiFi-channels, log on to the LaerdalNetMobile router to change to a low-traffic WiFi channel.  
• A “How to change the router channel” guide is available from the SimPad SkillReporter product page. [www.laerdal.com/SimPad-SkillReporter](http://www.laerdal.com/SimPad-SkillReporter)  
• The most reliable connection for single manikin use is the USB cable. A cable connected manikin appears in the manikin list as preselected and connected. |