

Linkbox 101

TROUBLESHOOTING AND BEST PRACTICES

Presenter Introduction – Edward Carter

- With Laerdal almost 2 years
- Technical Help Desk team
- Processes over 1000 emails per month
- We answer over 2000 calls per month
- We test customer issues, beta releases of software

Presenter Introduction – Laurent Lanchais

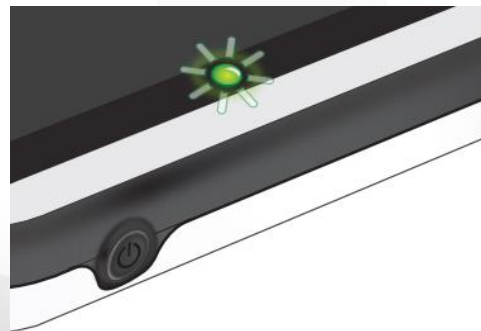
- Product Repair Specialist

Learning Objectives

- SimPad & Linkbox Battery Indicators
- Updating SimPad & Linkbox
- Using a mic/headset with SimPad & Linkbox
- Voice Conference Application settings
- Updating LLEAP
- Hosted Networking
- Troubleshooting

Simpad & Linkbox Battery Indicators

- Flashing yellow – Off and charging battery
- Steady yellow – Off and battery charged
- Flashing green – Starting and shutting down
- Fast flashing green - Updating
- Steady green – On
- Flashing red – Low battery
- Steady red – Error, needs service, or dead battery



Finding current software versions

- SimPad
 - System Settings
 - About SimPad
 - Software Version
- Linkbox (from SimPad)
 - About Simulator
 - Software Version
- Linkbox (from LLEAP)
 - Simulator Firmware & Network Wizard
 - Configure Network or Update SimPad/Linkbox
 - About Linkbox
 - Software Version

Updating software on SimPad

- Turn on SimPad
- Ensure battery level of 30% or more
- Connect SimPad to PC using USB cable
- SimPad disk drive will appear
- Copy update file to the SimPad drive
- Disconnect USB cable once transfer is complete
- SimPad will show "Updating" after a few seconds
- Update process will take around 10 minutes
- Main screen will appear when done

Updating software on Linkbox

- Turn on Linkbox, wait for solid green light
- Plug in AC adapter (preferred) or ensure battery level of 30% or more, if used
- Copy update file to a USB stick/thumb drive
- Insert USB stick into Linkbox
- Power light will flash quickly, showing update is in progress
- Solid green light indicates update complete

Setting up a mic and using your SimPad with a headset


Plug headset into SimPad



The headset microphone will be routed to the manikin



 = From instructor to manikin

 = From manikin (separate microphone) to instructor.

 Note

- The headset output on the Link Box duplicates the sound to the manikin. It can be used to improve the sound by adding additional speakers around the manikin.
- Some simulators have an internal microphone, and don't require a Link Box setup.

Setting up a mic and using your SimPad with a headset

Configure the Auxillary Button

Manual Mode preferences
Current theme: Pneumothorax

- Select theme each time
- Theme behavior
Always start a new session
- Intervention behavior
Stay after clicking intervention
- ECG menu options
Show all heart rhythms
- CPR Settings
Select and customize guidelines
- Auxiliary button setup
Customize the auxiliary button
- Select patient simulator
SimNewB

Manual Mode preferences
Auxiliary button setup

- Light touch
Activate the green button on the screen
- Press and hold
Activate microphone

Press and hold

- Activate microphone
- Mute microphone
- Go to home

Press and hold to speak

Press and hold to mute



Return to Session Overview

LLEAP VCA Settings and Configurations

Voice Conference Application - Instructor

Options Help

- Volume settings...
- Audio device setup...
- Connect to a SimMan3G simulator manually...
- Connect to SimPad Link Box manually...
- Exit



Speak (F5)

LLEAP VCA Settings and Configurations

Volume settings ✕

Instructor Audio Controls

Main Volume

Microphone: Speaker:

Mute Mute

Simulator Audio Controls

Main Volume

Microphone: Speaker:

Mute Mute

Other Settings

Echo suppression level:

Max

Med

Min

Enable echo cancelling

Simulator noise reduction

Duplex settings (only for SimMan3G family simulators)

One-way communication (either talk or listen)

Two-way communication (talk and listen simultaneously using echo-cancelling technology)

Close

LLEAP VCA Settings and Configurations

Audio Device Setup ✕

Instructor audio settings

Input Device: Primary Sound Capture Driver ▼

Output Device: Primary Sound Driver ▼

Output Pan: Center ▼

Use new audio device automatically

1st gen. linkbox audio settings

Use recommended audio routing for 1st gen. linkbox

Output Device: Primary Sound Driver ▼

Output Pan: Right ▼

Apply Close

Updating LLEAP Software and verifying software version

- Laerdal Simulation Home – hover mouse cursor over tiles to display version installed
- Use Update tool to update:
 - Connect computer to internet
 - Click “Check again”
 - Download desired update
 - Install
- Alternatively, update from web site
 - www.Laerdal.com/downloads
 - Download once, copy installer to multiple PCs

Hosted Networking

- More stable than ad-hoc “SimLink” network
- Avoid Windows 10 driver issues
- Set up on Patient Monitor (recommended) or Instructor PC
- LLEAP 6.3 or later

Setting up Hosted Network

- Laerdal Simulation Home
- Network Selector
- “Host network or manage hosted network” (bottom-right)
- Enter unique network name and password
- “Start on boot”
- “2.4 GHz mode” – recommended for compatibility
- Start

Setting up Hosted Network

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Hosted network

A hosted network, using Connectify Hotspot, will turn this computer into a wireless network that others can connect to.

Network name	<input type="text" value="NursingAnne2"/>
Password	<input type="text" value="SimNetwork"/>
Start on boot	<input checked="" type="checkbox"/>
Status	Idle

Connect SimPad/Linkbox to Hosted Network

- Tether SimPad/Linkbox via Ethernet
- System Settings
- Network
- Configure SimPad and Linkbox
- Select the hosted network from the list
- Type network password
- Click OK

Connect to Hosted Network using LLEAP

- Tether Linkbox to PC via Ethernet
- Simulator Firmware & Network Wizard
- Configure Network or Update SimPad/Linkbox
- Select the Linkbox
- Configure Network
- Select the hosted network
- Enter password
- Click Connect
- WiFi Status should show Connection Succeeded

Troubleshooting issues

- Static sounds coming from head speaker
 - Check cable for damaged/missing pins
 - Update Linkbox software
- Manikin Cable
 - Might be plugged into Linkbox upside-down
 - Causes weird behavior
 - Constant seizing
 - Wrong manikin type detected
 - Limited functionality
- Manikin identification
 - LLEAP connection screen
 - SimPad System Settings, About Simulator
 - Force-update simulator firmware

Troubleshooting issues cont'd

- SimPad stuck at Laerdal splash screen
 - Connect to PC via USB
 - If SimPad is detected, attempt software update
- SimPad solid red light
 - Charge SimPad
 - Attempt software update
- Linkbox power light flashes continuously
 - Remove battery, use AC adapter
 - Attempt to update Linkbox using alternate method
 - Turn off Linkbox
 - Insert USB drive with update file
 - Turn on Linkbox
 - Quick flashing power light indicates update started

Navigating Laerdal.com

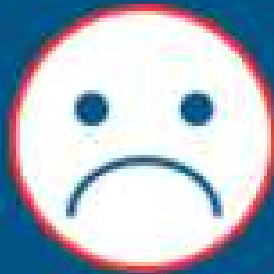
- Fastest way to find software & documentation
 - Laerdal.com/downloads
 - Click product name
- Downloads if only product number is known
 - Search product number
 - Click product under “More information”
 - Select “Downloads”
- If you end up on main product page
 - Click “Shop” at top-right

Resources

- [Hosted network walkthrough](#)
- [SimPad/Linkbox user guide](#)
- [How to update SimPad/Linkbox software](#)
- [LLEAP downloads](#)
- [SimPad/Linkbox classic downloads](#)
- [SimPad/Linkbox PLUS downloads](#)

Session Survey

How was your experience?



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best meet your needs.

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your feedback on
this session!**

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Keep the
conversation
going after the
event...

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