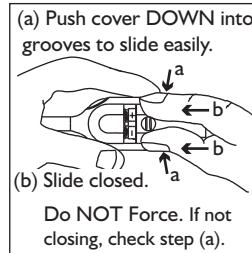
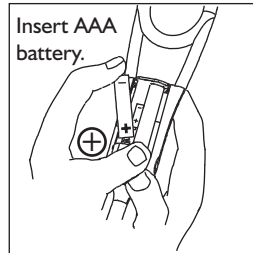
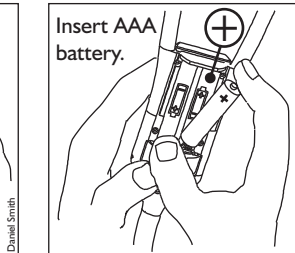
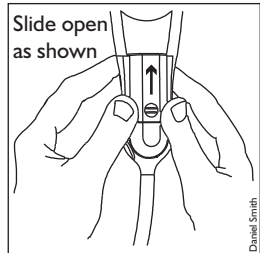


Getting Started

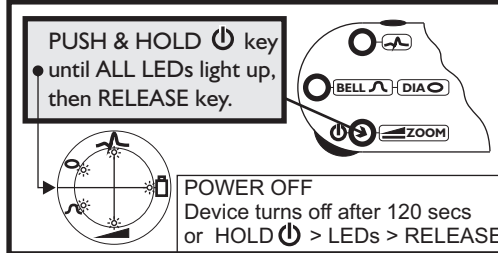
Attention: See Reference CD-ROM for complete User's Manual

START

1 Install batteries. NOTE POLARITY. Push springs to seat batteries properly. Align cover & close.

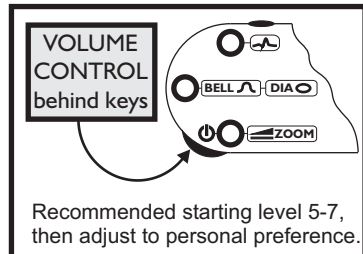


2 Power On

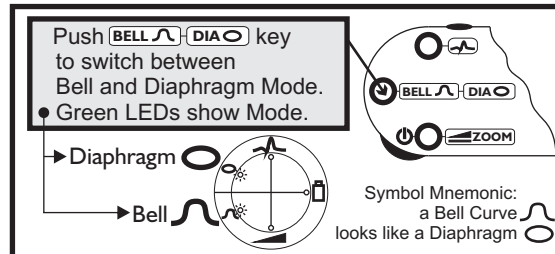


USE

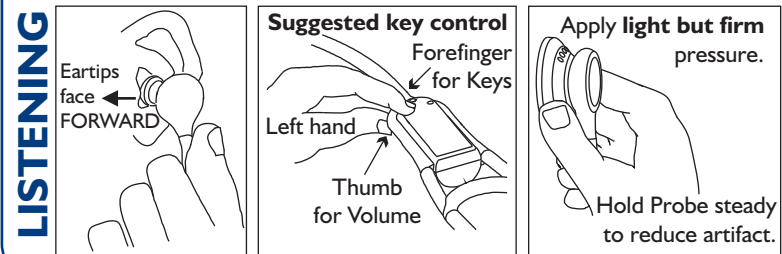
3 Adjust Volume



4 Select Mode - Bell or Diaphragm

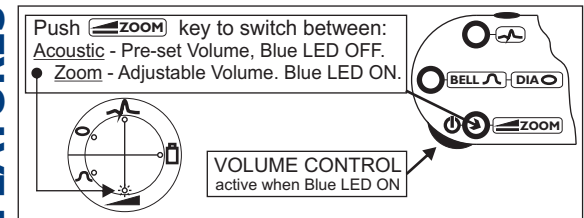


5 Listening with the ds32

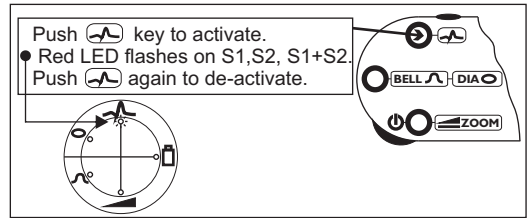


FEATURES

6 Acoustic Mode - for non-augmented sound.



7 Sync - S1 / S2 LED for cardiac cycle timing.



The EmD Diaphragm detects signals in the sub-sonic frequency range, to reproduce quiet low-frequency heart murmurs. Patient chest wall motion, or unsteady examiner hand motion, can induce large-amplitude sub-sonic vibrations. This can overload the detector and produce signal artifact or cutout. It is then helpful to hold the Probe so that the fingers holding the Probe also touch the patient chest wall (such as the left edge of the thumb and the fingertips in the above figure.) The Probe and chest wall then move in unison, with a consistent, light diaphragm pressure.

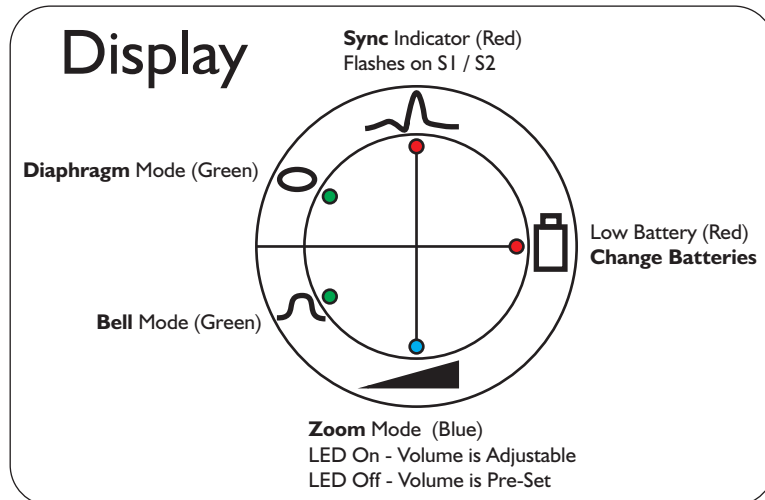
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Rhythm)ds32
See Over for Quick Reference

Quick Reference

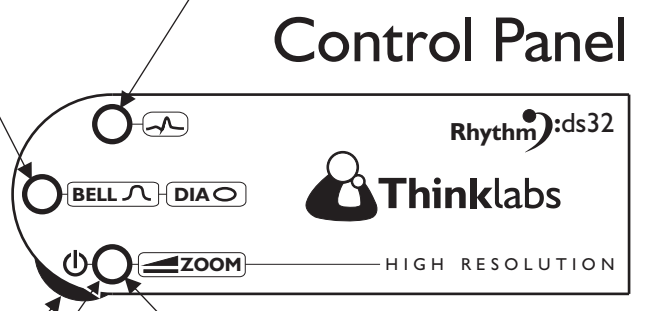
See Over for Getting Started guide



Select Bell or Diaphragm
Green LEDs show selection

Sync Indicator LED - S1/S2 Cardiac Timing
Push key to activate/deactivate
(See Over and CD-ROM for details)

Volume Control
behind Control Panel
(active when Blue LED is On)



Zoom - Select Pre-Set or Adjustable Volume
Push key to alternate between augmented Zoom mode and pre-set non-augmented Acoustic modes:

Mode	Blue LED	Function
Zoom	ON	Augmented ADJUSTABLE Volume to "zoom in" by increasing Volume.
Acoustic	OFF	non-augmented PRE-SET Volume similar to acoustic stethoscope.

Power On
Push + Hold until all LEDs light then Release

Power Off
Shuts off after 120 seconds OR Push + Hold until all LEDs light then Release

Tips and Troubleshooting

Tips for Best Sound Quality

- Apply Probe with light, steady contact, not excessive pressure. (Step 5, See Over).
- The ds32 works best with direct skin contact. Avoid using through clothing.
- Experiment to find a preferred Volume level that optimizes clarity.
- Load the Reference CD into a computer and READ the User's Manual. The Manual contain USEFUL TIPS for obtaining best results.

Troubleshooting

- No Power: (a) Check batteries are inserted correctly. (Step 1, See Over). (b) Batteries need replacing.
- No Sound: (a) Increase Volume setting. (b) Check headphone fit (See Over).
- Unexpected interference sounds:
 - (a) Radio station or electromagnetic pickup: Change position/location.
 - (b) Continuous Buzzing: Diaphragm loose - tighten Diaphragm Ring.
 - (c) Other noises: Possible dust, lint or moisture inside Probe - Turn off device. In dust-free environment, unscrew Diaphragm ring. Wipe inside surface of diaphragm and sensor with an alcohol swab. Do not touch brass sensor plate or diaphragm with fingers. Allow to dry/evaporate naturally, then close unit.
- Problem unsolved? Contact Thinklabs. See Over for contact information.

See Reference CD-ROM for complete User's Manual

