



Zoll XA Series Quick Reference Troubleshooting Guide



Pre shift check (battery test) [\(Click NASC Zoll 2024-1\)](#) [\(Click NASC Zoll 2024-2\)](#)

It is necessary to perform a battery operation test in addition to the daily shift check procedure as in the manufacturer's instructions for use and the NAS Operator Training:

1. With the unit mounted on the wall charging bracket, check that the green auxiliary power LED illuminates on the front panel. You should also have a green or orange LED signifying the battery charge state.
2. Press the units' power on switch – verify the unit issues 2 audio beeps and that the red, yellow and green visual alarm indicators illuminate for 2-3 seconds.
3. Verify that the unit displays SELF TEST PASSED green box middle of screen.
4. If the message SELF TEST FAILED appears on the display remove from service and report fault.
5. Check that the Ready for Use (RFU) indicator is displayed on the top right front panel. If the RFU is flashing or displaying do not use, check that a fully charged battery is installed and if it continues to flash or indicate do not use, withdraw from service and report fault.
6. **Without powering off unit**, remove the unit from the wall mounted charging bracket, verify that the unit continues to operate without interruption and that the displayed icon indicates a fully charged battery is installed. Ensure no error messages.
7. Power off the device and power back on to ensure operating on battery power and verify unit displays – SELF TEST PASSED green box middle of screen.
8. Reconnect the device to wall mounted bracket.

If at any point it is observed that the green/orange charged/charging light is not illuminated on the Zoll, please check that neither of these cables have become disconnected.

This cable, which is under the mounting bracket

This cable, which is at the rear, connecting the black mounting plate to the Zoll device



Network Communication. [\(Click NASC Zoll 2024-3\)](#)

In order to ensure that any Zoll connectivity issues are identified at the start of the shift, the device needs to be powered up, the network system displayed (which will take about 40 seconds), and the update device list check completed. If this is successful, any mid shift transmission errors may be related to local cellular network problems.

Battery Rotation **(NASC Zoll 2024 - 6) SOP available with effect from 01 March 2024 through the QR code at end of this document.**

When additional batteries have been supplied, on each Monday morning, the first crew on duty on each EA/RRV will swop the battery from the bag into the device and place the fully charged battery from the device into the bag. The "spare" battery will hold its charge for a number of weeks and therefore a second fully charged battery will always be available.

ECG Leads

There have been a small number of reported errors with 12 lead acquisition: Some have reported loss of **all** leads/views once the 6 pre cordial cables are plugged in – it is possible that a poor (N) neutral or ground lead connection can lead to the loss of all 4 or 12 leads on the screen.

In the event that all 12 views are not visible or available, please ensure that you have checked that all electrodes (particularly the Neutral/Ground lead) and cables are firmly in contact with the patient’s skin (this may mean that some additional skin preparation is required), and that all cable connections to the XA are secure. NAS is currently looking at alternative ECG electrodes.

Cable management / Dust covers.

ECG cables (especially where they enter the connection block) are susceptible to damage if coiled tightly or bent at the point of entry. This can lead to non-visible breakdown of the internal wiring and therefore be a potential cause of failure. When not being used to acquire a 12 lead ECG, the protective cover which is attached to the 4 lead trunk cable should always be in place. If missing, please ensure a replacement is obtained via local structures.

Defib/Therapy cables.

The Zoll XA is equipped with a multi-function connector (MFC) on the defibrillation cable. There are a number of reports of damage to the data pins inside the MFC. This may be caused by inadvertent placement of the 30 joules test connector. Exercise caution when connecting the 30j connectors as, alongside the possibility of damage to the data pins, the bent pins may prevent the defibrillator pads being able to make firm contact with the power connections inside the MFC.



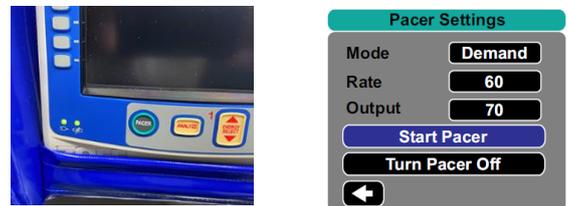
Auto case push. [\(Click NASC-Zoll 2024-4\)](#)

It is extremely important that all data is captured for each patient contact where the Zoll X-A has been used. The auto case push function has been demonstrated during initial training and is the only way the device should be power off on all occasions. Failure to transmit the most recent cases(s) on shut down, may be a local cellular signal issue, especially if 2 way transmission to the server was confirmed during the pre-shift check.



Pacer mode. [\(Click NASC-Zoll 2024-5\)](#)

While pacing is not currently an authorised intervention at any clinical level, it is possible that the function may be inadvertently switched on. Defibrillation is not possible in this scenario. If this should happen; in the Pacer setting pop up menu, use the navigation keys to place the blue cursor over the “turn off pacer” and select. You will need to manually change back to “Pads” view from lead II.



As an alternative method of exiting Pacer mode, press the “Charge” button which will bring the device in the defibrillator mode and exit pacing.



Adult v Paediatric Settings

There have been a couple of crew queries regarding over inflation of paediatric blood pressure cuffs, causing some discomfort to the patient. A reminder to change the mode from Adult to Paediatric, (middle – top of display), this should solve this issue.

Further information in the form of Feature Guides are available by clicking on the blue hyperlinks in the table above, clicking [HERE](#), or scanning the QR code to the right.

If you encounter any fault which cannot be resolved through the actions above, report the issue immediately to the manager on duty (ORM or Shift Manager) and to Accuscience, as per the flow chart.

