

Cox Box 08 Customer Troubleshooting Guide



Rev D: 26 July 2010

Ben Nielsen

Index

Battery Wont Hold Charge.....	2
Diagnostics You Can Do.....	3
Tips & Tricks.....	4

Battery doesn't hold charge although it displays a full charge at beginning of practice:

1. Battery cells may be mismatched and require 'rebooting', please turn on Cox Box and let sit for 24-36 hours to drain battery, then put on charge for 8-12 hours to allow to fully charge.
2. If behavior persists, please send Cox Box and battery to NK for evaluation and repair.
3. If behavior stops, please take note of steps taken and date error occurred for future reference.

Diagnostics You Can Do:

1. If battery life or battery errors result, switch batteries with another Cox Box and observe the result. If the error or low battery life follows the battery, it is likely the cause of the behavior. If the error or low battery life follows the Cox Box, then the Cox Box likely has an issue with the charging circuit or other circuitry fault.
2. If static, low-, or no sound output occurs, try switching microphones while using the same Cox Box/boat wiring combination; this will help to determine if a particular microphone is at fault. Alternately, moving one microphone/Cox Box combination from one boat to another will also help to determine if the boat wiring/connection needs replacing.

Tips & Tricks:

1. Battery voltage can be tested on the two terminals shown in Figure 5 using a multimeter; a full pack should be 12.60V, half capacity is 11.1 V; Cox Box wont work below 9V; if voltage is $0 < V < 9$, then an imbalance in the battery cells is likely.
2. Press and hold the 'recall/memory' button while the Cox Box is charging to view the battery voltage. Please see above for voltages corresponding to approximate battery capacity.
3. Press and hold the 'store/split' button after charging the Cox Box for 15 minutes, if '80' appears, 'batt err' is likely to occur; if '0b' appears, Cox Box is estimating battery life, and if '0F' appears, Cox Box is tracking battery life.
4. 'Hotswapping' is removing the battery from the Cox Box while it is on charge – this should never be done as it is possible to cause a 'batt err' to occur.

Final Note: Note-taking and observing patterns are often the key to discovering the problem. Take note of when odd behavior occurs (during practice/how far into practice, volume controls, which microphone was used, which boat was being used, etc.) to help determine the cause of the problem.

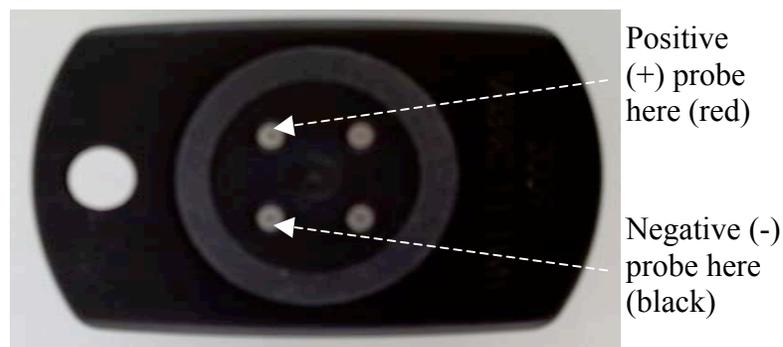


Fig. 1