

**Background:** On November 18th, Axon will release an updated firmware for the TASER 7 conducted energy weapon (CEW), Firmware Version 1.7.2. This firmware version will include the following key updates:

- **Fix for False Major Errors - “Non-Critical Part of High Voltage Module has Malfunctioned.”**
  - Axon has observed that some TASER 7 units that are functioning properly have reported a Major Error in which Evidence.com (Axon Evidence) notes the following description: “Non-Critical Part of High Voltage Module has Malfunctioned.”
  - The large majority of errors with this description are due to a false error flag in FW versions 1.6.2 and lower.
  - Axon recommends the following for any device that has shown this specific error:
    - Replace the battery pack in the CEW and wait for the hourglass to disappear from the CID.
    - Enter Function Test mode by pressing both Arc switches simultaneously and confirm the CEW is running FW 1.7.2.
    - Perform a function test by arming the CEW, and pressing one of the Arc switches.
    - Confirm that no errors are reported on the CID.
    - Re-dock the battery pack, which will upload newest logs to Axon Evidence removing the error from the “TASER 7 Health” page in Evidence.com (Axon Evidence).
  - In rare occurrences this false major error flag could state the following in Axon Evidence: “Critical Part of High Voltage Module has Malfunctioned.”
    - If this error is showing for a CEW, the same steps as above should be taken.
- **Fix for Batteries Incorrectly Reporting 0% and Major Low Battery Error.**
  - In occasional circumstances, when a battery does not make a strong enough connection to the CEW, it could lead to the battery pack experiencing an error.
    - Most often this occurs if a user does not fully seat the battery pack into the TASER 7 CEW.
    - Typically in these scenarios, a user may see 01/09/2031 in the CEW logs, as the communication issue is related to the Real Time Clock part of the battery pack’s circuit.
  - In FW Versions 1.6.2 and lower, this connection issue could cause the battery pack to encounter an error, which would be cleared the next time the pack is docked.
    - For non-rechargeable battery packs, this same error could lead to the pack dropping 32.5% instantaneously.
    - Any non-rechargeable battery packs which experienced this drop in percentage should be returned to Axon and replaced through the RMA process.



- FW Version 1.7.2 increases the robustness of the communication protocols between the CEW and battery pack to ensure that this does not lead to the battery pack experiencing an error.
- **Fix for Major Battery Pack Errors.**
  - Battery packs may have experienced a Major Error running Firmware 1.6.2 and lower which could result in different observations:
    - Battery pack unable to upload logs from a CEW resulting in log sync error on the dock.
    - Hourglass icon persisting and not disappearing from the CID.
- **Improved Evidence.com (Axon Evidence) Reporting of Battery Capacity Checks.**
  - Rechargeable battery packs will undergo a capacity check every 90 days to calibrate themselves for maximum health over their 5-year useful life (see Training Bulletin 22.0-05). The battery pack's percentage remaining is set to 0% during these capacity checks, and the dock will show a solid yellow LED during this time.
  - FW 1.7.2 will report a new major error to users in Evidence.com when a battery pack is removed from the charger during a capacity check.
    - The error message in Evidence.com is "Battery removed from dock during capacity check."
    - Batteries that are removed from the charger during a capacity check should be re-docked until the LED on the dock is solid green.
    - To remove the error message from Axon Evidence, upload new logs from the CEW with the pack after the capacity check has completed or with a different battery showing a solid green LED.
    - Capacity checks typically take 6-8 hours to complete.
- **Improved Logging when Multiple Trigger Pulls Occur for Extended Cycle.**
  - In cases where both TASER 7 cartridges have been deployed, and a user desires to extend the cycle past 5 seconds, the user can pull the trigger another time.
  - When this occurs, the cycle will extend by 5 seconds from the time that the trigger is pulled (example if the trigger is pressed again 3 seconds into the weapon's cycle, the electricity will continue to flow for a total of 8 seconds).
    - Previously, this would show in the logs as an 8-second deployment. Based on feedback from customers and a desire to show the actions that were taken more clearly, the logs will now display a graph for the two distinct trigger pulls. In this example, the logs would show a 3-second activation, followed by a 5-second activation.
- **Other minor improvements and bug fixes.**

