Verified Voting Foundation

ELECTION PROTECTION YOU HAVE THE RIGHT TO VOTE
1-866-OUR-VOTE

Electronic Voting Machine Information Sheet

ES&S DS200 Digital Scan System

Name/Model: ES&S DS200 Digital Scan System
Maker: Election Systems & Software
Voter-Verifiable Paper Trail Capability: Uses paper ballots

Brief Description: The ES&S DS200 is a precinct-based, voter-activated paper ballot counter and vote tabulator. The DS200 possesses a 12" LCD touch screen, which is used to provide voters with feedback, such as an overvote warning. When the polls close, the ES&S DS200 prints out the voter logs so election officials can have a paper tally.[1]

Detailed Voting Process: The ES&S DS200 functions much like a traditional paper ballot system. Upon entering the voting precinct, the voter will receive a paper ballot; the voter then shades in the paper ballot with any standard pen or pencil and inserts the ballot into the ES&S DS200, where they are given a chance to review their votes. As votes are entered, the ES&S DS200 stores the vote tallies on its internal memory card. Optional land line and wireless modems are available for the DS200.[2] When the polls close, the ES&S DS200's internal printer prints out the precinct's vote report on paper.[3]

Past Problems:

What to Look For

1. Overvote Notification. When the DS200 monitor warns a voter that she has **overvoted** (voted for more candidates than legally permitted for an office), a green icon appears on the monitor screen which allows the voter to select the option to proceed with the ballot "as is," which means your vote for the overvoted office will not be counted. Voters who see this message and did not intend to overvote or are uncertain if they overvoted should select the **red** icon on the monitor to have your ballot kicked out of the machine and then ask pollworkers for a new ballot.

2. Security Seals. Ideally, the DS200's exposed ports, memory card access areas, ballot box doors and case seams would be covered with tamper-evident security seals. The integrity of these seals should be maintained at all times, and only breached under controlled, explained circumstances. A voided seal looks like this:http://www.flickr.com/photos/joebeone/2247733620/ . Seals should be logged to maintain chain of custody of sensitive materials.

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[1]From the manufacturer's product brochure, available at:http://www.essvote.com/HTML/docs/brochure_DS200_US_v5.pdf
[2]Id.
[3]Id.

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3. Ballot Box Access. Optical scan systems have at least one and possible more ballot boxes. Each ballot box should be inspected by a voter at the beginning of voting to make sure that they are empty. These ballot boxes should locked and/or be sealed with tamper-evident tape.

4. The Memory Card is Sensitive. Corrupt memory cards may be able introduce viruses, cause the main election server to crash and falsify votes. Access to the memory card should be controlled, monitored and logged at all times.

5. Correct Inks. Some Optical Scan systems have trouble reading red inks or inks with red in them. Voters should use the writing instrument provided at the polling place or, if voting at home, black ballpoint pen that does not bleed through paper.

Past Problems:

May 2010 *Ohio.* During logic and accuracy testing in Cuyahoga County, the DS200 experienced a number of screen freezes, system lockups and shutdowns. The US Election Assistance Commission issues a product advisory.[4]

November 2008 *Florida.* The DS200 shows a higher overvote rate than for other precinct-based optical scan units; a user interface that does offers a green "accept" option and a red "reject" option is criticized.[5]

August, 2008. *Florida*. In two counties, problems with DS200 scanners were noted; in Pinellas, screens froze and there were paper jams. In Pasco, minor problems occurred, followed by the inability to transmit results by modem.
[4]

[4] http://www.eac.gov/assets/1/AssetManager/Product_Advisory-ES&S-06.25.10%20FINAL.pdf
[5] http://ffec.org/reports/Summary%20of%20DS200%20Overvote%20Findings.pdf