

March 4, 2008

To: AVC Advantage Customers using series 9.0 firmware

From: Joe McIntyre, Senior Project/Account Manager

Re:	WinEDS Technical Product Bulletin -
	AVC Advantage Party Turnout Issue / Operator Panel Usage

Purpose

The purpose of this bulletin is to inform you of a situation - and its solution- that occurs when pressing a combination of operator panel buttons during a primary (or other election using option switches), causing the party turnout (or options switch totals) to be posted incorrectly to the machine summary totals file.

Symptom

After closing the polls of an AVC Advantage machine, Results Report may be printed from the machine showing all contest/candidate totals and party turnout (option switch) totals.

It has been observed that the "Option Switch" or Party Turnout Totals section of the Results Report may be misreported whereby turnout associated with the party or option switch choice is misallocated. In every instance, however, the total turnout, or the sum of the turnout allocation, is accurate.

Cause

During a primary election, the "option switches" on the operator panel must be used to activate the voting machine. The operator panel has a total of 12 buttons numbered 1 through 12. Each party participating in the primary election is assigned one of the option switch buttons. The poll worker presses a party option switch button based on the voter authorization slip given to the voter after signing the poll book, and then the poll worker presses the green "Activate" button. This action causes that party's contests to be activated on the ballot face inside the voting booth.

Let's assume the Democrat party is assigned option switch 6 while the Republican Party is assigned option switch 12. If a Democrat voter arrives, the poll worker presses the "6" button followed by the green "Activate" button. The Democrat contests are activated and the voter votes the ballot. For a Republican voter, the poll worker presses the "12" button followed by the green "Activate" button, which then activates the Republican contests and the voter votes the ballot. This is the correct and proper method of machine activation when using option switches.

However, we have found that when a poll worker selects the lower of the two assigned selection codes, followed by pressing an unused selection code and then pressing the green "Activate" button, the higher numbered party on the operator panel has its contests activated instead while the selection code button for the original party stays active on the operator panel.

Using the above example with the Democrat Party as option switch 6 and the Republican Party as option switch 12, the poll worker presses button 6 for Democrat. The red light next to button number 6 lights up and the operator panel display will show DEM. The poll worker then presses any unused option switch. The red light stays lit next to option switch 6 and the display still says DEM. Now the poll worker presses the green "Activate" button. The red light stays lit next to button number 6, but the operator panel display now says REP and the ballot in the voting booth will activate the Republican Party contests.

In each and every case where a machine displays the party turnout issue at the close of the polls, this is the situation that would have caused it, and it can be duplicated on any machine. In addition, for this situation to have occurred, the voter that was in the voting booth at the time of the poll workers action would have voted the opposite party ballot instead of telling the poll worker that the incorrect ballot was activated and the machine would not allow them to vote the party they intended. If they had informed the poll worker, they could have made the party selection change and the voter would have then voted the correct ballot style.

The individual ballot images were updated correctly with the ballot style voted by each voter entering the voting booth, including the party turnout based on the contests that were activated. The summary file was updated as well with the candidate totals as voted by each voter. However, the party turnout in the summary file was updated based on the original option switch chosen on the operator panel. This means that the Republican contests were updated with the Republican candidate votes cast, but the party turnout would have updated the Democrat Party since it was the original party selected on the operator panel. This also means that the information and reporting through WinEDS is correct since WinEDS gathers and tallies data from the individual ballot images.

Solution

We've identified an easy configuration change that will mitigate the party turnout reporting / switch issue. In WinEDS, if the AVC Advantage machine type option for "Panel Mode" is set to "Force Selection Code" instead of the default "Best Fit" then the problem is eliminated.

The voting machine activation procedure is slightly different, requiring two key presses for double-digit option switches (10-11-12) and an additional confirmation step. Rather than pressing the number 12 option switch and then the green "Activate" button, the poll worker will be required to press "1", then "2" then "Activate", at which point the selection name is displayed with the additional prompt of "Cancel" or "Ok". The poll worker must then press either the yellow "Test" button to cancel or the green "Activate" button to accept and activate the ballot face on the machine.

Although this solution requires some degree of poll worker training insofar as they will need to be instructed on the new "Cancel" and "Ok" query, it offers the customer a solid protection mechanism.

Another recommendation would be that every county <u>only use option switches 1 through 9</u> as those numbers will still only require the use of a single button being pressed followed by the green "Activate" button and the "Cancel" or "Ok" question. By changing the "Panel Mode" option to "Force Selection Codes", the poll worker will always be required to either "Cancel" the option switch selection and return to voter inactive or once again press the green "Activate" button for "Ok".

If an invalid or unused option switch is pressed by the poll worker followed by pressing the green "Activate" button, the message below will appear on the operator panel display:

INVALID SELECTION CODE

PLEASE TRY AGAIN

Making Modification in WinEDS

1. From the WinEDS menu bar, select **Configuration > System Setup**.

The System Setup window is displayed:

ection Configuration	up] Election Setup Election Day 操	/ Post Election Tools Window Help			ء ء
Ballot Header General Information	Operator Panel Tally Type	Visio Element Tally Category Termino	Language logy Response Set	Dictionary Election Type	Audio Machine Type
<u>N</u> ame Major ∀ersion	Any County 3.1 Minor V	State NJ /ersion 74			
Registration Code	009908010001				
Default Password	****				
<u>C</u> ounty Number					
<u>W</u> rite-In Name	Personal Choice				

2. Select the Machine Type tab.

System Setup							_	
Ballot Header	Operator Panel	[·	Visio Element	ļ.	Language	Dictionary	Audio	
General Information	Tally Type	Tally Category	T	Ferminology	Response Set	Election Type	Machine Type	
Machine Type (Total 2)	Registration	Ratio						
◆ AVC Advantage AVC Edge		400 200						
Close		Cancel	1		Apply		Help	
Close		Cancel			Apply		Hel	P

3. Double click AVC Advantage.

The Machine Type Maintenance window is displayed.

Machine Type Maintenance	X
Machine Type AVC Advantage	<u>Audio</u> <u>B</u> itmap
Configuration Options	
Panel Mode	Force Selection Co
Header Mode	Best Fit
Results Reports	Force Selection Codes
Consolidation Reports	
Include ballot image in consolidation?	No
Report Style	By Ballot 👻
Pollworker Training Mode	Disabled 👻
Auto Activate	Disabled 👻
Audio Voting	Enabled 🗨
Auto Activation Card Expires (minutes)	60 🚔
Under Vote Notification	Disabled 🗨
OK Cancel	Print <u>H</u> elp

- 4. Under Configuration Options, from the **Panel Mode** drop down menu, select **Force Selection Codes**.
- 5. Click **OK**.

The Panel Mode option has been changed.

Contact Information

If you have questions about the information contained in this document, please contact:

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