



VERITY™

**troubleshooting
field guide**

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troubleshooting field guide



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how this guide works

This troubleshooting guide is organized into two sections:

- ▶ **Issue directory:** a list of potential issues, with a summary of the procedures to resolve each issue, in the order they should be attempted.
- ▶ **Procedure reference:** provides detailed instructions for each resolution procedure.

The procedure for using this guide is outlined below:

- 1** Look up the problem you are having in the **issue directory**.
- 2** Each entry in the issue directory will have a set of **resolution steps**.
- 3** Follow the resolution steps in order; **check for success after each step**.
- 4** Some resolution steps will indicate a page number; If you need further details on these procedures, look up the indicated page number in the **procedure reference** for that step.

a systematic approach to troubleshooting

- Remain calm
- Identify the issue or symptoms as reported
- Gather further information
- Think broadly
- Do not jump to conclusions
- Ask questions
- Establish a theory to explain the source of the problem
- Research resolution steps based on your theory
- Use available documentation to identify the resolution steps
- Attempt resolution
- Check for success
- Repeat

troubleshooting issue directory

Issue	Resolution Steps (try each step in order, until the problem is resolved)
Access code does not work (Verity Touch Writer)	<ol style="list-style-type: none"> 1 Confirm access code was entered correctly 2 Disable the access code (and confirm access code was not used) (p 29) 3 Issue a new access code, if applicable
Access code was printed but not used (Verity Touch Writer)	<ol style="list-style-type: none"> 1 Disable the access code (if desired) (p 29)
Access controller does not work	<ol style="list-style-type: none"> 1 Verify device settings (p 26) 2 Restart device (p 24) 3 Contact Election Office and replace device*
Ballot incorrect (wrong ballot issued)	see Spoiling Ballots (Verity Touch Writer)

Issue	Resolution Steps (try each step in order, until the problem is resolved)
<p>Ballot printer does not work (Verity Touch Writer)</p> <p>IMPORTANT: When setting up Verity Touch Writer, the ballot printer must be powered on and connected BEFORE powering on Verity Touch Writer (otherwise, connectivity problems may result). However, when troubleshooting a printer problem, you should not restart Verity Touch Writer until you have exhausted all other options.</p>	<p>1 If you are using the Manual Paper Tray, make sure the blue tray release button is engaged (p 35)</p> <p>2 If the Verity Touch Writer reports a problem with the printer while printing a ballot, do not restart the Touch Writer. Follow instructions on <i>the printer</i> to resolve the issue.</p> <p>INPUT JAM: Pull out the paper tray and check for/remove jammed paper. Replace the tray.</p> <p>FEED JAM/EXIT JAM: On the top of the printer, push the round black button on the lower left to open the top cover. Check for and remove any jammed paper. Close the top cover.</p> <p>FEED JAM/EXIT JAM: Open rear cover on the back of the printer and check for/remove jammed paper. Close rear cover.</p> <p>3 If resolving the issue on the printer does not clear the error message on the Verity Touch Writer, restart the <i>printer</i> using the power switch on the bottom right side of the printer.</p> <p>4 If the error is cleared but still no ballot is printed, select Reprint Ballot on the Verity Touch Writer screen (if available).</p> <p>5 Verify printer cable is plugged in to printer and Verity Touch Writer; verify printer has AC power.</p> <p><i>continued on next page</i></p>

Issue	Resolution Steps (try each step in order, until the problem is resolved)
Ballot printer does not work (Verity Touch Writer), <i>continued</i>	<p>6 If you are still unable to produce a printed ballot, spoil the Verity Touch Writer ballot (if possible) (p 27), restart the <i>Touch Writer</i> (p 24), and issue a new ballot to the voter. Document the process using the spoiled ballot log.</p> <p>If you are still unable to print ballots, contact your Elections Office to replace the printer.*</p>
Ballot stuck in scanner (ballot has been cast)	<p>1 Check/note device message(s), if any; confirm ballot has been cast</p> <p>2 Restart device (p 24)</p> <p>3 If scanner jams repeatedly, contact election office; use emergency ballot slot and/or replace device*</p>
Ballot stuck in scanner (ballot has not been cast)	<p>1 Check/note device message(s), if any; confirm ballot has <i>not</i> been cast.</p> <p>2 Open scanner cover; remove and flatten ballot; close scanner cover and re-feed ballot.</p> <p>3 Restart device (p 24)</p> <p>4 If scanner jams repeatedly, contact election office; use emergency ballot slot and/or replace device*</p>

Issue	Resolution Steps (try each step in order, until the problem is resolved)
Ballot will not scan	<ol style="list-style-type: none"> 1 Check and respond to device message(s), if any 2 Confirm ballot has not been cast 3 Remove, flatten and re-feed ballot 4 Clean scanner (p 30) 5 Contact election office; use emergency ballot slot and/or replace device*
Battery not present/no battery power	<ol style="list-style-type: none"> 1 Check battery (p 21) 2 Restart device (p 24) 3 Replace battery 4 If no AC power, contact Election Office and replace device*
Closed polls too soon (Election Day)	<ol style="list-style-type: none"> 1 Verify polls are closed 2 Contact Election Office and replace device*
Device has incorrect polling place/precinct	<ol style="list-style-type: none"> 1 Verify polling place from any device report 2 Contact Election Office and replace device*
Device is hot or smells hot	see Battery not present/no battery power
Device screen is dark	see Device will not turn on

Issue	Resolution Steps (try each step in order, until the problem is resolved)
Device turns off/loses power (was on previously)	<ol style="list-style-type: none"> 1 Check power supply (p 18) 2 Check battery (p 21) 3 Restart device (p 24) 4 Contact Election Office and replace device*
Device will not turn on	<ol style="list-style-type: none"> 1 Check tablet connection/docking (p 20) 2 Check power supply (p 18) 3 Check battery (p 21) 4 If power on report is available, verify firmware version (p 23) 5 Restart device (p 24) 6 Contact Election Office and replace device*
Forgot to print reports before closing/suspending polls and powering off	see Printing reports after powering down
Headphones do not work/no sound	<ol style="list-style-type: none"> 1 Check headphones (p 25) 2 Verify device settings (p 26) 3 Restart device (p 24) 4 Contact Election Office and replace device*

Issue	Resolution Steps (try each step in order, until the problem is resolved)
Language chosen incorrectly	see Wrong language selected - Verity Touch Writer
No AC power (AC power indicator on device screen is red/crossed out)	<ol style="list-style-type: none"> 1 Check power supply (p 18) 2 Restart device (p 24) 3 Contact Election Office and replace device*
No battery power (Battery power indicator on device screen is red/ crossed out)	see Battery not present/no battery power
No thermal printer paper/replacing thermal printer paper	1 Load thermal printer paper (p 32)
No vDrive Found	1 Contact Election Office and replace device*
Overheating device	see Battery not present/no battery power
Password does not work	<ol style="list-style-type: none"> 1 Confirm correct password and re-enter 2 Call Election Office 3 Retry with correct password

Issue	Resolution Steps (try each step in order, until the problem is resolved)
Polling place (incorrect on device)	<i>see</i> Device has incorrect polling place/precinct
Power loss	<i>see:</i> <ul style="list-style-type: none"> • Device turns off/loses power (was on previously) • Device will not turn on • No AC power
Precinct (incorrect on ballot)	<i>see</i> Spoiling ballots (Verity Touch Writer)
Precincts (incorrect on device)	<i>see</i> Device has incorrect polling place/precinct
Printer not working (Verity Touch Writer ballot printer)	<i>see:</i> Ballot printer does not work (Verity Touch Writer)
Printer not working (device thermal printer)	<i>see:</i> Thermal printer does not work
Printing reports after powering down	<ol style="list-style-type: none"> 1 Press red power button on back of device to turn it back on and print reports needed

Issue	Resolution Steps (try each step in order, until the problem is resolved)
Scanner problems	<p>see:</p> <ul style="list-style-type: none"> • Ballot stuck in scanner (ballot has been cast) • Ballot stuck in scanner (ballot has not been cast) • Ballot will not scan
Spoiling ballots (Verity Touch Writer) (ballot not yet printed)	<ol style="list-style-type: none"> 1 Spoil ballot (p 27) 2 Issue new access code, if applicable
Suspended polls too soon (Early Voting)	<ol style="list-style-type: none"> 1 If dictated by local procedures, restart device (p 24) and reopen polls.
"System Test Fail" message	<ol style="list-style-type: none"> 1 Restart device (in rare instances this may need to be done more than once) (p 24) 2 Contact Election Office and replace device*

Issue	Resolution Steps (try each step in order, until the problem is resolved)
Thermal printer does not work	<p>1 Check/make note of any device message(s)</p> <p>2 Load/reload thermal paper (p 32)</p> <p>3 Restart device (p 24)</p> <p>4 Contact Election Office and replace device*</p> <p><i>Note: if printer is printing a long string of numbers, see Thermal printer has entered diagnostic mode.</i></p>
Thermal printer has entered diagnostics mode	<p>If the user inadvertently holds down the printer feed button while powering up, the printer will enter diagnostics mode and the printer cannot be used normally. If printing is attempted while in diagnostics mode, a long string of numbers will print. See p 34 for an example of this report.</p> <p>1 To reset the printer to normal operations mode, restart the device (p 24)</p>
vDrive error message (Invalid vDrive, corrupt vDrive)	<p>1 Contact Election Office and replace device*</p>
vDrive lost/missing	<p>1 Contact election office and replace device*</p>

Issue	Resolution Steps (try each step in order, until the problem is resolved)
Wrong ballot/ ballot style/ precinct chosen - Verity Touch Writer (ballot not yet printed)	see Spoiling Ballots (Verity Touch Writer)
Wrong language selected - Verity Touch Writer (ballot not yet printed)	<ol style="list-style-type: none">1 Select the language button in the top left of the Verity Touch Writer screen.2 Choose the correct language.

***when replacing devices...**

- ▶ Spare devices should be predefined for the correct polling place before they are deployed.
- ▶ Record replaced device serial number on an Out of Service Equipment tag and affix tag. Log a full description of the problem on the Equipment Chain of Custody form, if sending for repair.
- ▶ Follow local procedures governing the transfer of any Cast Vote Records held on replaced devices to the central counting station.
- ▶ If an piece of equipment is deemed to require service, and you believe it must be sent to Hart for repair, see instructions for creating an Return Materials Authorization in the *Verity Support Procedures Guide*.

troubleshooting procedure reference

Checking power supply

1 Confirm the AC power cord is plugged in to the back of the device. ▶



2 Confirm the power cord and power brick are plugged in securely. ▶



3 If you are using a power strip or UPC, confirm the plug coming from the power brick is plugged into the strip, and make sure the power strip is turned on.

4 Confirm the power cord/power strip/extension cord is plugged into a working, 3-prong wall outlet.



5 After checking connections, press the red power button on the back of the device to turn on the device. ▼



Checking tablet connections/docking

1 Check to see if the tablet docking light is green, indicating the tablet is seated. ▶



2 Check that the tablet is firmly seated in its cradle, and the metal lid brace is fully extended and locked. ▶



3 Check that the tablet lock is engaged (locked). ▶

▶ If you have reconnected the tablet, restart the device ([page 24](#)).



Checking the system battery

1 Make certain all voters using the device have finished voting. If restarting Scan, make sure voters have access to the emergency ballot slot.

2 Press the red power button on the back of the device until the device shuts down. ▶



3 Unlock the device tablet (A) and remove it from its cradle (B). ▼



4 Open the battery door on the back of the tablet and check that the battery is present. ▶



5 Check that the battery is connected properly. The tab on the connector coming from the battery must snap over the tab on the wire coming from the tablet. ▶



6 Check the battery charge by pressing on the test button on the bottom left of the front of the battery. ▼



! IMPORTANT: When reconnecting the tablet, don't forget to lock the tablet back in place.

Checking firmware

- 1 Check with the central election office for the correct firmware version.
- 2 On the Power-On Self Test Report, check that the firmware version matches the correct version for your jurisdiction.

Power-On Self Test Report

12/12/2014 5:44 PM

S/N: 000014
Verity Scan
Version: 18.7.17938SLI

Power On Diagnostics

MCU FW:13 PV:2	Pass
Battery	Pass
Main Power	Present
vDrive Ports	Pass
Touch Screen	Pass
Scanner	Pass

Notes

USB Controller: Cypress Semiconductor

BIOS Version: ALASKA - 1072009 [20140505000000.000000+000]

Restarting a device

1 Make certain all voters using the device have finished voting. If restarting Scan, make sure voters have access to the emergency ballot slot.

2 Press the red power button on the back of the device until the device shuts down. ▶



3 Wait 15-30 seconds.

! IMPORTANT: If restarting Verity Touch Writer, make sure the Ballot Printer is powered on **BEFORE** powering on Verity Touch Writer.

4 Press the red power button on the back of the device again to turn the device on. ▶



5 Follow the prompts on the device screen.

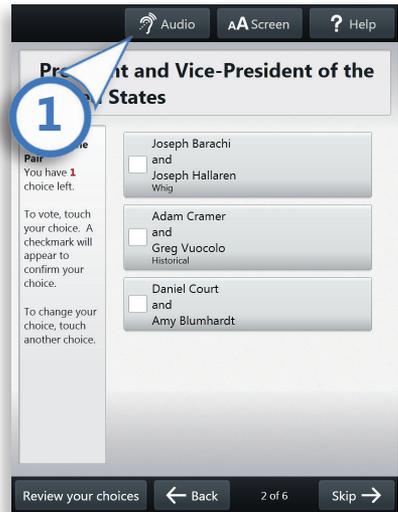
Checking headphones

- 1 Check that the headphones are connected to the proper (left) port on the Verity Access, and that the connection is secure. ▼



Verifying device audio settings

1 On the Verity Touch Writer, select the **Audio** button. ▶



2 Verify the device audio settings. Select **Volume** to check the volume settings. ▶



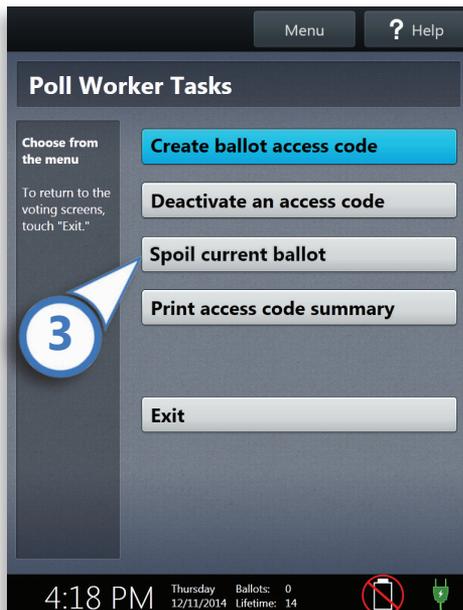
Spoiling a Ballot (Verity Touch Writer)

(if ballot has not yet been printed)

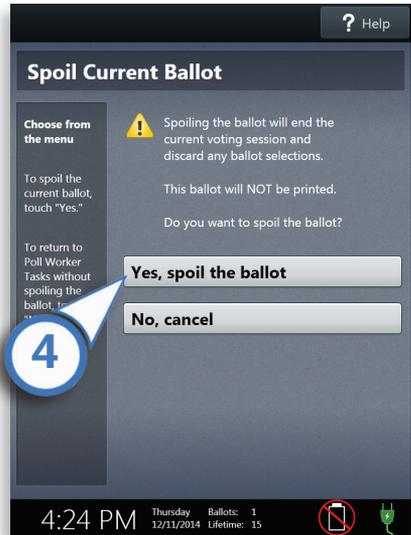
- 1 Press the blue poll worker button on the back of the Verity Touch Writer. ▶



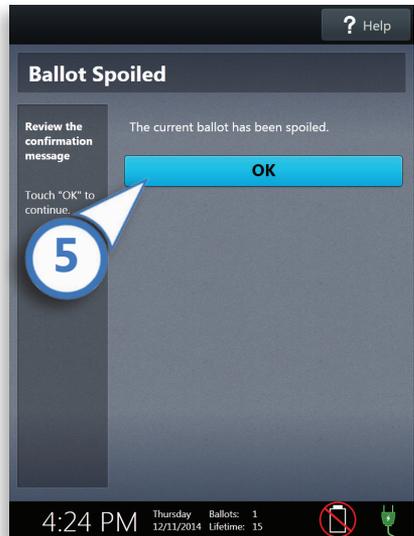
- 2 Enter the Poll Worker Code.
- 3 Select **Spoil current ballot**. ▼



4 Select Yes, spoil the ballot. ▶

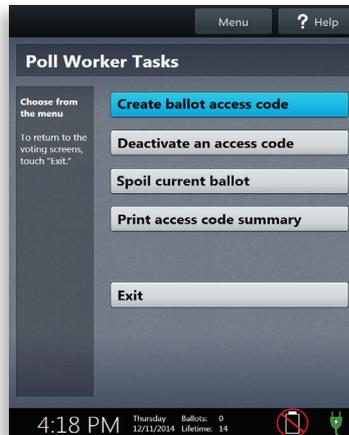


5 Select OK. Follow local procedure for filling out and filing spoiled ballot paperwork.



Disabling an access code

- 1 Push the *blue* poll worker button at the back of the Verity Touch Writer.
- 2 Enter the Poll Worker Code.
- 3 Select Deactivate an access code. ▶



- 4 Check the Access Code status and follow local procedure to determine if a new code should be issued:

- **Assigned and Open:** access code can be deactivated and a new access code may be issued following local procedures.
- **Expired:** access code can no longer be used, but a new access code may be issued following local procedures.
- **Assigned and Cast:** access code was used to cast a ballot; a new access code should not be issued.

Cleaning the Verity Scan scanner

1 Make certain all voters using the device have finished voting. Make sure voters have access to the emergency ballot slot.

2 Press the *red* power button on the back of the Verity Scan to turn it off. ▶



3 Unplug the AC power cord from the back of the Verity Scan. ▶



4 Gently lift the scanner door and clean the upper and lower glass plates with a lint-free isopropyl alcohol wipe. Do not reuse the wipes after use; do not pour or spray liquids directly on the scanner. When finished, plug in AC power, press red power button, and follow on-screen prompts to resume using the device.



Verifying the polling place

1 Refer to the Open Polls Report to confirm polling place name and voting type, or refer to any report header to confirm the Polling Place name.

VOTING MACHINE SURVEY BALLOT	
Election Date: 1/23/2014	
Sample County	
Sample Polling Place	
Early Voting	
Verity Scan	
S/N: 345642	
Version: 01.01.45	
Ballot Counter:	0
Lifetime Counter:	5034
Open Polls Report	
02/07/2014 1:46 PM	
Polls are Open.	
Ready to accept ballots	
Official Signatures	
<hr/>	
<hr/>	
<hr/>	

Loading thermal printer paper

1 The thermal printer is located on the right-hand side of the voting device. ►



2 To open the paper compartment: While standing in front of the device, pull the lever on the top of the printer cover towards you. ▼



3 To replace paper: Place the new paper roll into the printer as shown. Paper must roll out from the bottom. ▼



4 Close the printer cover. The paper must extend out from underneath the front edge of the cover. The white button can be used to advance the paper. ▼



thermal printer diagnostics report

If the user inadvertently holds down the printer feed button while powering up, the printer will enter diagnostics mode and the printer diagnostic report will print (sample report shown). Once the printer is in diagnostics mode, it cannot be used normally. If printing is attempted while in diagnostics mode, a long string of numbers will print. To reset the printer to normal operations mode, restart the device (p 24).

```

LTPD-5V series Interface
DPU-D2 [ Ver 1.10 ]
  06.Jul.2011
Copyright(C):SII

Mechanism:LTPD245
          58mm, 5V, 8dot/mm

* SWDIP1 *
1) Autocutter:Disable
2-3)Peripheral device:
      Disable
4) Autoloading:Disable
5) Mark sensor:
      Option sensor
6) Near end sensor:Disable
7-8)(Reserved)

* SWDIP2 *
1) Head drive:
      Dynamic div.
2-3)Division method:64[dot.]
4-8)(Reserved)

* SWDIP3 *
1) Mark mode:Disable
2-6)Thermal paper:
      TF50KS-E2D
7-8)(Reserved)

* SWDIP4 *
Print density:100[%]

* Communication type *
Serial communication
Baud rate:115200[bps]
Parity:None
Bit length:8[bit]
Data control:Busy,Xon/Xoff

* Font information *
漢字文字の使用可
外字の使用可
Down-load Font enable

* Memory information *
User area:880K[byte]
Check sum 1:0CBF
Check sum 2:5541
Check sum 3:1E65
Check sum 4:6FEB

*****

```

Using the Manual Paper Tray on the Ballot Printer (Verity Touch Writer)

1 Open the front manual feed door; flip up and extend the tray as shown.



2 Load 8.5"x17" or 19" ballot paper as shown.



3 Press the blue release button (located to the right of the paper) to raise the paper to meet the rollers. ▶



notes:

notes:

notes:

Hart Support

Note: the following contact information is for use by election officials and staff only; poll workers should not be encouraged to call the Hart CSC Help Desk.

Hart Customer Support Center (Help Desk)

1.866.275.4278



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