ClearVote 2.3

ClearAccess Supervisor Guide

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Table of contents

Preface

This section defines the purpose of this document.

About this document

This document provides operating instructions and reference information for supervisors using the ClearAccess accessible voting system. It is compliant with the documentation requirements of *VVSG 2005, Volume 2, Section 2.8*.

Scope of this document

This document contains the following sections:

- Chapter 1. Overview
- Chapter 2. ClearAccess ballots
- Chapter 3. Security and privacy
- Chapter 4. ClearAccess roles
- Chapter 5. ClearAccess election modes
- Chapter 6. The Ballot Report and logs
- Chapter 7. Installing and configuring the Oki Data B432dn and Oki Data B3432dn-B printer
- Chapter 8. Installing and configuring the Lexmark MS521dn printer
- Chapter 9. Setting up the ClearAccess station
- Chapter 10. Pre-election testing
- Chapter 11. Voting preparation
- Chapter 12. Voting with the touchscreen
- Chapter 13. Voting with the accessible keypad
- Chapter 14. Voting with the sip-and-puff device
- Chapter 15. Voting with the barcode scanner
- Chapter 16. Ending an election
- Appendix A. Replacing the sip-and-puff mouth tube
- Appendix B. Using a voter's sip-and-puff device
- Appendix C. Troubleshooting
- Appendix D. Error messages

Intended audience

This document is for election officials and election staff who are responsible for operations and maintenance before, during, and after an election. Clear Ballot personnel also use this document to support election officials and election staff.

Conventions

This section describes conventions used in this document.

References to ClearVote products

A ClearVote® system can comprise the ClearAccess®, ClearCast®, ClearCount®, and ClearDesign® products. Jurisdictions are not required to purchase all products. You can ignore references to any ClearVote products that are not part of your voting system. Also ignore implementation options that are not relevant to your policies and procedures.

BDF and ADF

ClearAccess imports an election definition contained in an accessible definition file (ADF) created by ClearDesign. ClearCount and ClearCast import an election definition contained in a ballot definition file (BDF) created by ClearDesign.

Versions of ClearDesign earlier than 2.0 created unencrypted ADFs and BDFs. ClearDesign 2.0 and later versions produce encrypted ADFs and BDFs. You can distinguish between unencrypted and encrypted ADFs and BDFs by the ending of the filename.

File type	Filename ends in
Unencrypted accessible definition file	adf.zip
Encrypted accessible definition file	adfx.zip
Unencrypted ballot definition file	bdf.zip
Encrypted ballot definition file	bdfx.zip

In this document, the general terms ADF and BDF can refer to both the unencrypted and encrypted versions of these files.

For the specifics of the ADF and BDF file formats, see the following:

- *ClearDesign Accessible Definition File Guide*
- *ClearDesign Ballot Definition File Guide*

Contact us

Clear Ballot Group welcomes your feedback on our documentation. Please send comments to Documentation@ClearBallot.com.

If you have questions about using your product, contact your Clear Ballot representative.

Chapter 1. Overview

ClearAccess is an in-person ballot-marking system designed to ensure access for all voters. ClearAccess runs on commercial off-the-shelf (COTS) computers. The ClearAccess software captures the choices of voters and prints machine-readable ballots.

1.1 Hardware components of ClearAccess

Figure 1-1 shows the hardware components of a ClearAccess accessible voting system. Table 1-1 on page 18 describes each of the numbered component shown in Figure 1-1.
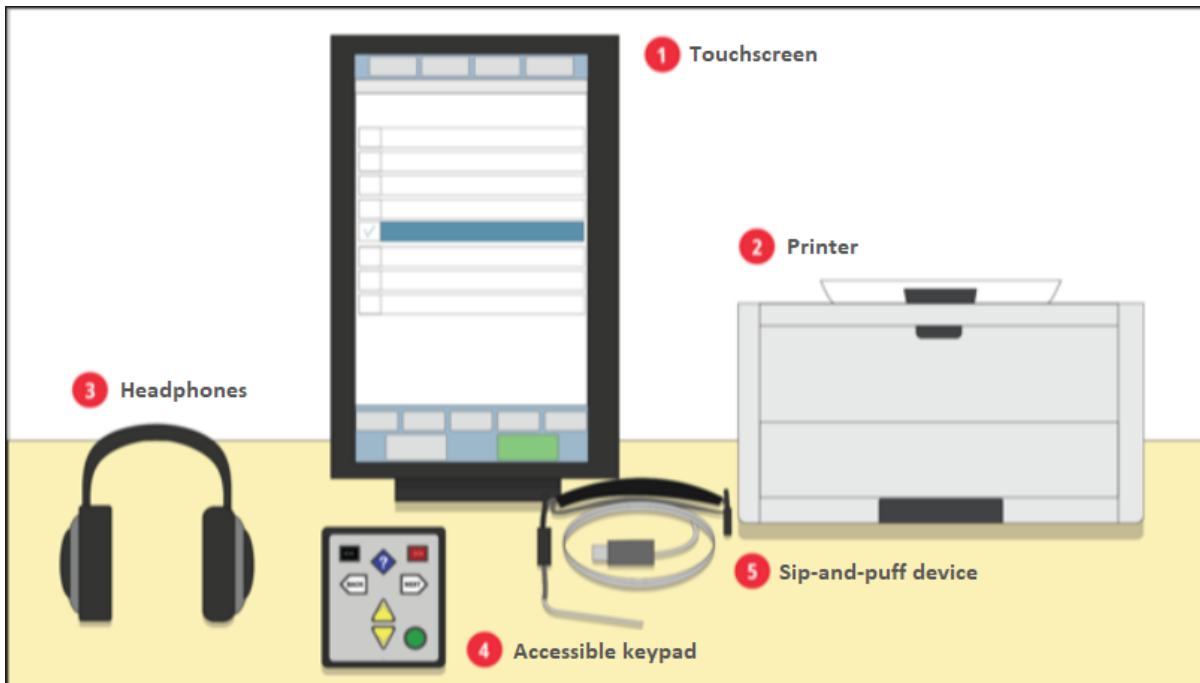
Figure 1-1. Hardware components of a ClearAccess system

Table 1-1. Description of ClearAccess hardware components

Item	Description
1. Touchscreen	The touchscreen provides a visual presentation of the ballot content with options to adjust text size or contrast. Voters can make ballot selections on the touchscreen or can use an assistive device, such as the sip-and-puff device or accessible keypad.
2. Printer	Voters end the ClearAccess voting process by printing a machine-marked, scannable paper ballot.
3. Sip-and-puff device	The sip-and-puff device enables voters to make ballot selections using their mouths instead of touching the screen or using the accessible keypad.
4. Accessible keypad	The accessible keypad enables voters to make ballot selections with a tactile device.
5. Headphones	The headphones provide an audio version of the ballot content.

An uninterruptible power supply (UPS) provides backup power for the ClearAccess system if a power outage occurs. Optionally, jurisdictions can attach a barcode scanner (not shown in Figure 1-1) that enables a poll worker to scan a QR code to select the applicable ballot style for a voter on the ClearAccess system.

1.2   Supported models of touchscreen computers

Voters make their election choices on a touchscreen computer. ClearAccess supports the models of touchscreen computer models described in this topic. See the *ClearVote Approved Parts List* for additional information.

Dell Optiplex touchscreen, model 5250
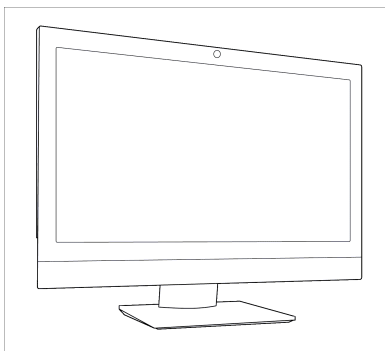
The Dell Optiplex computer is a 17-inch touchscreen. Its power button is located at the bottom right on the front.

Figure 1-2. Dell Optiplex 5250

Elo E Series touchscreen, model ESY15E2 (E757464)
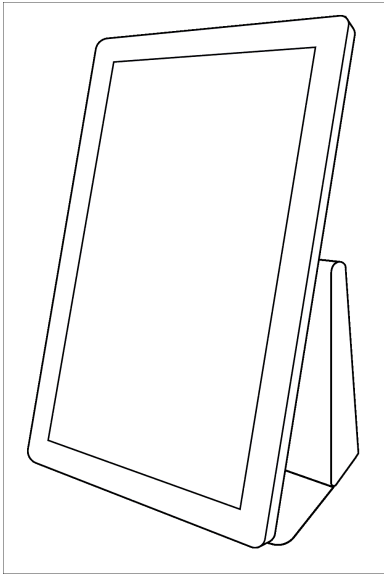
The Elo E Series computer is a 15-inch touchscreen. It includes four USB ports in the port bay on the left side of the pedestal. The port bay can be enclosed by a cover that comes with the computer. The power button is located on the front left side of the pedestal behind the touchscreen.

Figure 1-3. Elo E Series

Elo X Series touchscreen, model ESY20X2 (E521522)
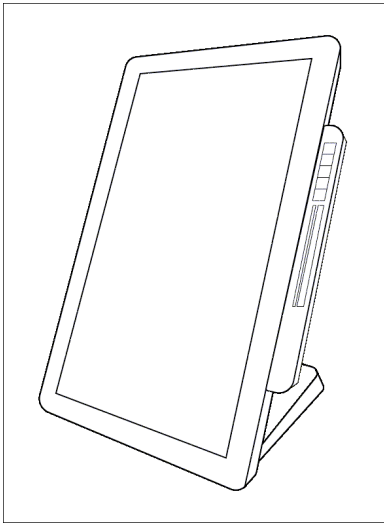
The Elo X Series computer is a 20-inch touchscreen. It includes six USB ports, four in the port bay on the rear of the device, and two on the underside of the touchscreen frame below the Elo logo. The port bay can be enclosed by a cover that comes with the computer and can be secured by a screw. The power button is located on the touchscreen frame below the Elo logo.

Figure 1-4. Elo X Series

EloPOS, model EPS15E2
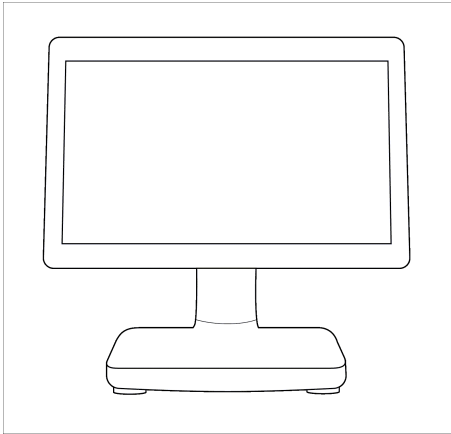
The Elo X Series computer is a 15-inch touchscreen. The power button is at the back of the computer on the upper right when the touchscreen is in portrait mode.

Figure 1-5. EloPOS computer

1.3 Printers

After making election choices on the ClearAccess computer, voters print their ballots on the voting station's printer. ClearAccess supports the printer models described in this section.

Figure 1-6. Brother HL-L2340DW printer

Oki Data B432dn and Oki Data B432dn-B printers

The Oki Data printers are compact laser printers with duplex printing that can print up to 1200 x 1200 dpi resolution and 42 pages per minute. The printers connect to the ClearAccess station via a highspeed USB interface, and have a separate toner and image drum for lower operating costs.

The Oki Data B432dn printer can print ballots up to 14 inches long. The Oki Data B432dn-B printer can print ballots up to 22 inches long.
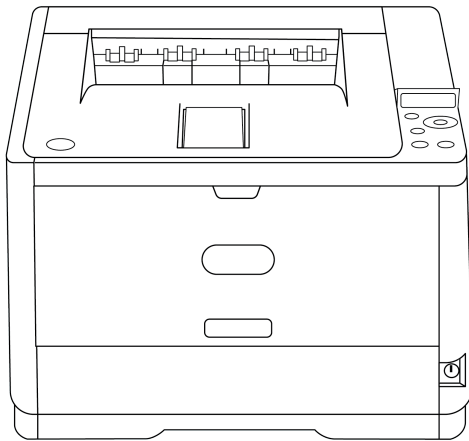
Figure 1-7. Oki Data B432dn printer

Lexmark MS521dn printer

The Lexmark MS521dn printer is a compact laser printer with duplex printing capability. It has a 250-sheet capacity tray and prints monochrome pages up to 2400 x 600 dpi resolution. It connects to the ClearAccess station via a high-speed USB 2.0 interface.

The Lexmark MS521dn printer can print ballots up to 22 inches long.
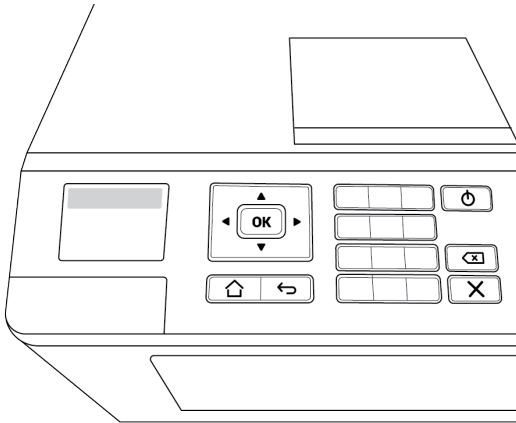
Figure 1-8. Lexmark MS511dn printer

1.4 Paper stock

The ballot paper that you can use with ClearAccess depends on the stock weights supported by the ClearCast and ClearCount systems and your choice of printer. See the *ClearVote Ballot Stock and Printing Specification* for more information. Consult your Clear Ballot representative for help in selecting ballot stock.

1.5 Ballot lengths

The Oki Data B432dn printer supports the following ballot sizes:

- Width: 8.5 inches
- Length: 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21 and 22 inches

Out of the box, the printers automatically print ballots that are 11 and 14 inches long. Depending on the printer driver used, you can configure additional paper sizes.

The Lexmark MS521dn printer supports the following size ballots:

- Width: 8.5 inches
- Length: 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21 and 22 inches

Out of the box, the printer automatically prints ballots that are 11, 13, and 14 inches long. You can configure additional paper sizes.

1.6   Battery backup and UPS

The *Voluntary Voting System Guidelines* require that uninterruptible power supply (UPS) devices be available and able to provide a minimum of two hours of operating time for each voting station component. See the *ClearVote Approved Parts List* for a list of supported UPS devices.

To increase the time available for battery backup of the laser printer, ensure that additional UPS devices are available at the polls. Replace any marginally charged UPS before the start of a voting session.

UPS devices attached to a laser printer must have at least 1000-watt capacity (watts are not the same as VA). Do not assume that a 1500 VA UPS can output 1000 watts to operate a laser printer.

1.7   Encrypted accessible definition file (ADFx)

Jurisdictions use the ClearDesign election management system (EMS) to create the election and ballot configuration data for the ClearAccess voting station. The administrator role exports that data to a USB drive as an encrypted accessible definition file (ADFx) and loads it into the ClearAccess station.

Chapter 2. ClearAccess ballots

This chapter provides an overview of ClearAccess ballots.

2.1   Ballot design and language options

Contests, questions, candidates, responses, and language options for an election are configured in the ClearDesign EMS. The default ClearAccess instructions for navigating and controlling the ballot can also be customized in the ClearDesign EMS. For more information, see the ClearDesign user documentation.

2.2   Ballot content

Jurisdictions use ClearDesign to define elections and lay out ballot layouts. When an election definition and its ballot layouts are final, the ballot designer exports the data to an ADFx. An administrator then imports the ADFx into ClearAccess. For security, the ADFx is encrypted. Encryption ensures that only ClearAccess can read the contents of the ADFx.

Each ballot contains a unique, sequential set of contests. Each contest contains heading text followed by the list of candidates in the appropriate sequence. For questions, the question text is followed by the possible responses, typically *Yes* and *No*.

2.3   Ballot selection

After an election contained in an ADFx is imported into the ClearAccess station, the vote center is selected. Only ballots that are valid for the selected vote center can be voted on the ClearAccess station.

Each ballot is listed on the Select Ballot screen by precinct, split, and party (in the case of a closed primary).

A search function makes it easy to locate the appropriate ballot. If the list of ballot types does not fit onto a single screen, a vertical scroll bar appears on the right side of the ballot list for navigation.

2.4   Ballot presentation

ClearAccess can present a ballot on the touchscreen, play an audio version of the ballot over headphones, or both. A voter can make selections by using the touchscreen, accessible keypad, or a sip-and-puff device. A voter can use combination of presentation and input options.

Visual and audio ballots have the same content other than voting instructions.

2.5   Ballot navigation

The voter can move back or forth through the contests on the ballot and proceed to the ballot review at any time. The voter can also return from the ballot review to any contest on the ballot.

2.6   Voting instructions

Each ballot begins with detailed voting instructions. The voting instructions are in written or audio format depending on the format that the voter request. Voting instructions can also be repeated at the voter's convenience during voting.

Voting instructions can be customized according to local requirements.

2.7   Ballot settings

ClearAccess allows a voter to customize ballot-presentation options at any point in the voting process. A voter can customize the following:

- Ballot presentation language
- Ballot magnification
- Ballot color options
- Audio ballot presentation
- Visual ballot presentation

2.8   Overvoting

ClearAccess prevents overvotes. After a voter selects the maximum allowed number of choices for a contest, ClearAccess does not allow any additional choices.

If a voter tries to select more than the allowed number of choices for a contest, ClearAccess displays or plays a message. The voter must deselect one of the previous choices before he or she can select another choice.

2.9   Undervoting

An undervote occurs when a voter selects fewer than allowed number of choices for a contest. ClearAccess allows a voter to undervote a contest.

An election can be configured to present a warning message when an undervote occurs. The message requests the voter to confirm moving to the next or previous contest without selecting the allowed maximum number of choices in the current contest.

2.10   Blank voting

A blank vote occurs when a voter skips voting for an individual contest in an election. ClearAccess allows blank voting.

An election can be configured to present a warning when a voter does not select a choice in the current contest and attempts to move to the next or previous contest.

2.11   Write-in votes

Contests can be configured to allow the manual write-in of candidates whose names do not appear on the ballot. Spaces can be provided in each contest for write-in candidates up to the maximum number of allowed choices.

2.12   Straight-party voting (SPV)

For straight-party voting, a voter selects a party on the SPV Selection screen (Figure 2-1). As a result, all candidates endorsed by that party (voter group) become automatically selected. Depending on the requirements of the jurisdiction, a voter may be able to override the choices endorsed by a voter group for individual contests.
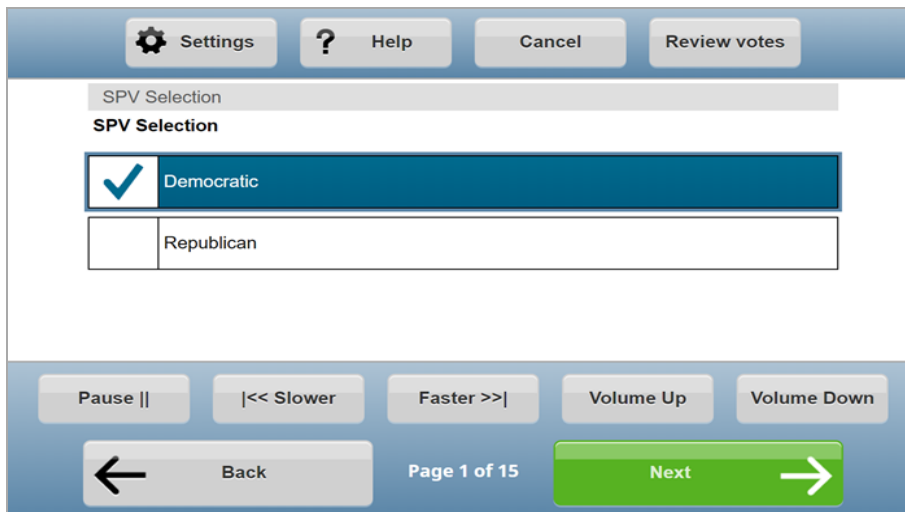
Figure 2-1. SPV Selection screen

2.12.1 Guidelines for straight-party voting

The following guidelines apply to straight-party voting:

- The setup of straight-party contests and party endorsements of candidates takes place in ClearDesign.

- The candidates endorsed by a party are usually candidates who belong to the party, but can include other candidates, such as independents.

- Some contests on a ballot may not be enabled for straight-party voting. No automatic selection of candidates occurs when a contest is not enabled for straight-party voting.

- If a voter selects a political party on the SPV Selection screen (Figure 2-1 on page 25) of ClearAccess, all candidates endorsed by the selected party are automatically selected in all subsequent contests for which straight-party voting is enabled on the ballot.

- The total number of candidates selected for a straight-party contest cannot exceed the allowed number of choices for the contest.

- In addition to selecting the straight-party option, a voter can also directly select individual candidates in any contest provided that the combined straight-party and directly selected choices do not exceed the maximum allowed number of choices for the contest.

- On the ClearAccess screens, candidates directly selected by a voter appear with a dark teal background. Straight-party selected candidates appear with a light teal background. See Figure 2-2.
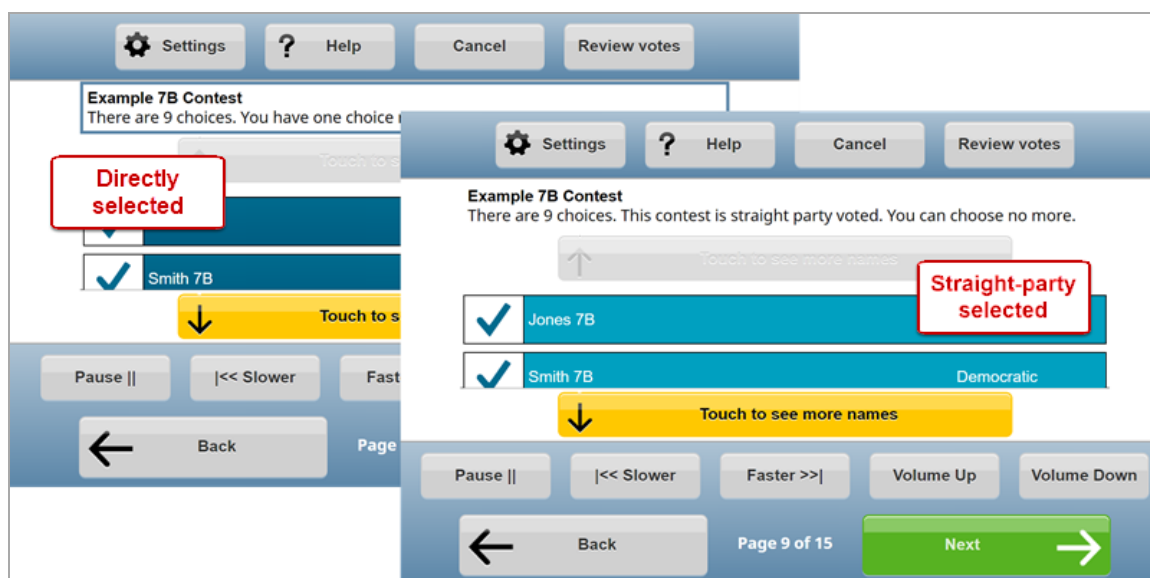
Figure 2-2. Straight-party voting: directly selected and straight-party selected candidates

- Deselecting the party choice automatically deselects all straight-party-selected candidates in all contests on the ballot. It does not deselect candidates that a voter directly selected.

- If the voter subsequently changes the party choice, the straight-party-selected candidates automatically switch to those endorsed by the newly chosen party in all ballot contests.

2.12.2 Straight Party Type

A Straight Party Type indicates how adjudication handles ambiguous cases where marks appear in straight-party voting (SPV) contest and in the partisan contests controlled by the SPV contest.

The Straight Party Type is assigned in ClearDesign on the Election dialog.

The ClearVote systems support the following Straight Party Type values listed in Table 2-1.

Table 2-1. Straight Party Type values

Rule	Description
None	(Default) If a jurisdiction does not use SPV, the Straight Party Type value is None
Additive	The SPV-selected party choice is applied to the contest. Any marks for additional candidates are counted. If the marked candidates plus the candidates for the SPV-selected party will result in an overvote, the entire contest is considered as overvoted, and no votes are counted.
Combine	The SPV-selected party choice is applied to the contest. If there are fewer candidates for the select party than allowed choices, any marks for additional candidates are counted. If the marked candidates plus the candidates for the SPV-selected party will result in an overvote, only the SPV-selected candidates are counted.
Exclusive	An SPV-selected party choice applies only if all ovals of a partisan contest are entirely blank. Otherwise, only the marked ovals are counted, and SPV is not applied to that contest.
Exclusive One Touch	This option uses the same logic as Exclusive. An exception occurs when voting a straight-party ticket in ClearAccess and then selecting a choice associated with a different party. In this situation, all the straight-party choices become deselected and the choice associated with the different party remains selected. Normal vote-selection rules apply when the ClearAccess voter selects additional choices. For example, a voter receives a warning if he or she tries to overvote the contest.
Override	SPV overrides or ignores any existing marks in partisan contest.

2.12.3 Exclusive straight-party conflicts

Suppose that following conditions apply:

- An election has a Straight Party Type of Exclusive.

- The voter selects some choices for contests on the ballot.

- The voter selects a party on the SPV Selection screen (Figure 2-1 on page 25).

- The party selected on the SPV Selection screen differs from the party affiliation of one or more candidate choices that the voter previously selected on the ballot.

In this situation, ClearAccess issues a warning message. The warning message indicates that the party selected on the SPV Selection screen will not affect any previously selected candidates affiliated with other parties.

Tap the **OK** to continue.

2.12.4 Straight-party overrides

Suppose that the following conditions apply:

- An election has a Straight Party Type of Override.

- A voter selects choices in contests that are eligible for straight-party voting.

- The voter selects a party on the SPV Selection screen (Figure 2-1 on page 25).

In this situation, ClearAccess issues a warning message. This message indicates that the choice on the SPV Selection screen will override the any previously selected choices for all contests eligible for straight-party voting.

Tap **OK** to accept the override and continue. Tap **Cancel** to cancel the straight-party selection.

2.13 Primary elections

A *primary election* determines which candidates will represent a political party for a slate of offices in a general election.

A primary election can be open or closed:

- In an *open primary*, the ballot includes all partisan and nonpartisan contests. The voter decides a party affiliation when selecting a ballot.

- In a *closed primary*, the ballot includes the partisan contests corresponding to a single political party and any nonpartisan contests in the election.

2.13.1 Open primaries in ClearAccess

In an open primary, ClearAccess presents a mandatory preference contest to a voter at the start of voting. The partisan contests presented to the voter correspond to the party selected for the preference contest. If the voter decides to select a different party in the preference contest, ClearAccess removes all previously made selections for partisan contests unless the voter reverts to the original party selection.

2.13.2 Primary preference selection

ClearAccess displays a warning message if a voter does not select a party preference for an open primary ballot. Selecting a party preference is mandatory for an open primary ballot.

2.14   Inactivity

If ClearAccess detects inactivity for a specified time, the system displays an inactivity timeout message.

If the voter does not respond, ClearAccess cancels the voting session after a specified time and redisplays the Select Ballot screen (See "Voting process" on page 94).

If the voter responds to an inactivity timeout message, he or she can continue voting.

The length of the inactivity timeout and cancellation timeout are set in the ClearDesign on the Device Type: Accessible Marker dialog.

2.15   Reviewing votes

At the completion of voting, the voter reviews the candidate and response selections made on the ballot using the Review Votes screen. The voter can move from the Review Votes screen directly to any contest on the ballot, make any desired changes to candidate/response selections, and return directly to Review Votes screen.

See "Reviewing choices on a ballot" on page 106.

2.16   Ballot printing

When voting is complete, the voter's paper ballot is printed. All ballot content appears on the printed ballot in the same order as presented on the ClearAccess screen. All selections printed to the paper ballot are identical to those made on the ClearAccess station. If a jurisdiction is using ballots with multiple languages, the printed ballot will also have multiple languages even though the voter only voted in their chosen language.

The printed ballot contains no information that identifies the voter or the method of voting.

The length of the printed ballot can vary, depending upon the ballot length configured in the ClearDesign.

Straight-party voting selections

If the voter accepted all straight-party-selected votes, the straight-party contest oval is filled in. If the voter deselected (unvoted) one or more straight-party selections on the ballot, the straight-party contest oval is not filled in. Instead, a black diamond prints next to the straight-party selections.

Ballot stubs

If ballot stubs have been configured for the election and stub printing is enabled, a stub prints with the ballot. The ballot designer determines the content of the stub. The content of the stub varies by jurisdiction. Typically, stubs serve as receipts to allow for ballot tracking and reconciliation. The ClearVote systems support up to three stubs per ballot.

ClearAccess allows you to turn off the printing of stubs. When turning stub printing on or off, you must adjust the size of the paper stock in the printer.

Examples of printing stubs

Suppose that you print a 17-inch card containing a 14-inch ballot with a 3-inch stub and you disable stubs. In this situation, you must replace the 17-inch stock in the printer with 14-inch stock.

Suppose that you print an 11-inch ballot without stubs and then enable printing of a 3-inch stub. In this situation, you must put 14-inch stock in the printer.

Reviewing the ballot and placing it in the ballot box

After the ballot is printed, the voter can review it for accuracy before placing it in the ballot box. The poll worker must provide the voter with a secrecy sleeve so that the voter can transport the ballot privately to the ballot box.

Chapter 3. Security and privacy

This topic describes security and privacy features of ClearAccess.

3.1 Privacy

The ClearAccess accessible voting station is designed to allow voters to cast ballots privately and entirely unassisted. Candidate and response selection, ballot navigation, ballot review, and voting anomaly resolution activities can all be performed using one of the input devices—touchscreen, accessible keypad, or sip-and-puff device. Communication to the voter is provided via touchscreen display or audio.

No voter identity information is recorded on the ballot. No voted ballot information is stored in the system.

To ensure the highest level of voter privacy, Clear Ballot recommends the following:

- Limit traffic flow at the voting location to authorized poll workers and voters.
- Configure voting screens to allow each voter to vote with complete privacy.
- Provide each voter with a secrecy sleeve to ensure that the voted ballot is covered as it is deposited into the ballot receptacle.
- Highlight voter privacy requirements when educating poll workers.

3.2 Security

The ClearAccess system is designed to ensure security in all stages of the election process, from election preparation to postelection administrative activities.

3.2.1 Fully hardened operating system

The ClearAccess touchscreen computer is fully hardened, with all remote communication software services and automatic updates disabled. The ClearAccess software runs in kiosk mode, a Windows operating system mode that allows only one application to run. Kiosk mode is a preferred method of securing a Windows device when that device is used for a specific task or used in a public setting. No other Windows functionality is available to users.

3.2.2 No remote access

The ClearAccess voting station is designed for use exclusively as a standalone system. It has no wireless or network data transmission capability.

3.2.3 Restricted system access

Access to the ClearAccess software is restricted to users who present the appropriate role-based credentials. When logged in, available functionality is limited to the activities permitted by the user's role. For example, security and system administration functions are only available to the administrator role.

Clear Ballot recommends that during all stages of the election process—election preparation, voting, postelection activities, and storage—physical access to the ClearAccess hardware be limited to authorized individuals.

3.2.4 Continuous validation of election information

The ClearAccess station gets its election and ballot information from the ADFx, which is validated in the following instances:

- When an election is first loaded on a voting station
- When an election is first opened in a ClearAccess session
- Each time the election administrator, poll worker, or voter role accesses the system

3.2.5 Data encryption

ADFxs are encrypted. Only ClearVote applications can read ADF data when a user supplies the correct role and code (password) combination. Codes are specific to individual elections.

3.2.6 Election media

Jurisdictions must screen all USB drives intended for use as election media for potential malware.

3.2.7 Logging

Critical activities performed using the voting station are written to the system log and the election log in chronological order. These logs can only be updated by the ClearAccess system.

Log files are validated at log in. The election log file is validated when an election user (election administrator, poll worker, voter) opens the election. The system log file is validated when any user logs in.

Chapter 4. ClearAccess roles

When you log in to the ClearAccess station, you must select a user role. The user role determines which activities and features are available to you during your ClearAccess session. Table 4-1 describes the five ClearAccess roles.

Table 4-1. ClearAccess roles

Role	Description
Administrator	The administrator role is for election workers who configure the ClearAccess station before an election. An administrator can do the following: • Load and unload elections • Update the date, time, printer, and display settings • Maintain the administrator and maintenance role codes
Election administrator	The election administrator role is for election officials who administer a polling station. Election administrators can do the following: • Configure the voting locations • Test ballots • Print ballot reports • Close an election
Maintenance	The maintenance role is a subset of the administrator role. A maintenance user can modify date, time, printer, and display settings on the ClearAccess station.
Poll worker	Poll workers can do the following: • Open and close the polls • Print ballot reports • Resolve issues if a voter's ballot does not print
Voter	The voter role enables a user to cast a vote after a poll worker logs the user in to the ClearAccess station. This role is available only in the Polls Open mode.

4.1 Codes (passwords)

Each ClearAccess user role has a code (password) that is required to log in.

- The voter, poll worker, and election administrator codes are defined in ClearDesign and are unique to each election. These codes must be communicated to users following the methods and security protocols established by your jurisdiction.

- The administrator and maintenance codes are default values defined by Clear Ballot and are communicated to your jurisdiction by your Clear Ballot representative. These codes are not election specific. They can be changed using the Setup feature. Only the administrator can modify the administrator and maintenance codes.

Note: Clear Ballot recommends that you change the administrator and maintenance codes from their defaults after installing the ClearAccess software. Use a reliable and secure password-tracking mechanism to record your ClearAccess codes.

4.2 The administrator role

The administer role can:

- Load and unload elections
- Select the ClearAccess printer
- Modify the ClearAccess station date, time, and on-screen button size
- Change the administrator and maintenance codes
- View the system log
- View details of installed ClearAccess and third-party software

Table 4-2 lists the options that are available when logged in with the administrator role.

Table 4-2. Administrator role—options

Option	Description	Available
About	Displays details about the installed ClearAccess and third-party software files	Always
Close Election	Closes the currently loaded election	Pre-election mode Election mode Postelection mode

Table 4-2. Administrator role—options (continued)

Option	Description	Available
Exit	Closes ClearAccess (and returns to the Windows Log In screen)	Always
Log Out	Logs out the current ClearAccess user role (and returns to the ClearAccess Log In screen)	Always
Logs	Displays the system log	Always
Open Election	Allows the administrator to select and load an ADFx	No Election mode
Setup	Allows configuration of system date and time, printer, button display, and administrator and maintenance codes	Always
Shut Down	Powers off the ClearAccess station	Always

4.2.1 File information

The About screen displays all ClearAccess files installed on the system, with their installation date and file digest, in addition to a comprehensive listing of all software packages installed on the computer, with a description and version. The information appears on two separate tabs and can be printed. The installed system information tab is fully searchable.

The About screen is only available to the administrator role.

4.2.2 Configuring the ClearAccess station

Certain aspects of the ClearAccess station are configurable and can be modified using the Setup feature, which is available to the administrator and maintenance roles only.

The Setup feature is available in all election modes. Table 4-3 lists the configurable settings in ClearAccess. See the *ClearAccess Maintenance Guide* for more information.

Table 4-3. Configurable settings in ClearAccess

Setting	Description
Date	Set the date for the ClearAccess station. Use if you need to override the Windows system date value.
Time	Set the time for the ClearAccess station. Use if you need to override the Windows system time value.

Table 4-3. Configurable settings in ClearAccess (continued)

Setting	Description
Time zone	Set the time zone for the ClearAccess station. Use if you need to override the Windows system time zone value.
Automatically Adjust for Daylight Saving Time	Specify whether ClearAccess should automatically adjust the system time for daylight-saving time changes. Use if you need to override the Windows daylight-saving time adjustment value.
DPI Setting	Change the size of the buttons in the ClearAccess display. Available sizes are: • 100 dpi (Default) • 130 dpi (Large) • 160 dpi (Extra Large)
Printer	Set the printer for the ClearAccess station. Must be done following installation of a new printer to ensure proper ballot printing.
Bar Code Scanner	Read-only. Displays the barcode reader model (if connected).
Restart printer on each session	Check to restart the printer each time a ballot is printed
Administrator password	Change the administrator role code. Available to the administrator only.
Maintenance password	Change the maintenance role code. Available to the administrator only.

4.3 The maintenance role

The maintenance role allows a user access to basic nonelection configuration options for the ClearAccess station. Table 4-4 lists the options that are available when logged in with the maintenance role.

Table 4-4. Maintenance role—options

Option	Action	Available
Log Out	Logs out the current ClearAccess user role (and returns to the Log In screen)	Always
Logs	Displays the system log	Always
Setup	Allows configuration of system date and time, printer, button display	Always

Table 4-4. Maintenance role—options (continued)

Option	Action	Available
Shut Down	Powers off the ClearAccess station	Always

4.4 The election administrator role

The election administrator role is used by a jurisdiction's election officials to test the election and prepare the election for voting. After an election has been loaded onto the system, it can be accessed using the election administrator role.

Table 4-5 lists the options are that are available when logged in with the election administrator role.

Table 4-5. Election Administrator role—options

Option	Description	Available
Ballot Reports	View and print ballot reports	Always
Change Vote Center	Change to another vote center	Pre-election mode
Close Election	Close the election after all administrative tasks for the election are complete	Pre-election and Postelection modes
Close Polls	Close the polls to prevent further voting	Polls Open mode
Log Out	Log out the current ClearAccess user role (and return to the ClearAccess Log In screen)	Always
Logs	View the election log and system log	Always
Open Polls	Open the polls and allow voting to begin	Election mode
Re-Open Polls	Return to voting	Postelection mode
Resume Voting	Allow voting to resume	Polls Open mode
Set for Election	Set the station to the Election mode (after pre-election testing has been completed)	Pre-election mode
Set Options	Configure ballot stubs and serial numbers	Pre-election, Election, and Polls Open modes
Shut Down	Power off the ClearAccess station	Always
Test Vote	Test the system by casting a test vote	Pre-election mode

4.5   The poll worker role

The poll worker role can:

- Open and close the polls at the beginning and end of a day of voting

- Assist voters with ballot printing issues

- View and print the election log and the system log

- View and print ballot reports

The poll worker role is not available until an election is loaded on the ClearAccess station and set to the Election mode. After the election is closed, the poll worker role is not available.

Table 4-6 lists the options that are available when logged in with the poll worker role.

Table 4-6. Poll Worker role—options

Option	Use to	Available
Ballot Reports	View and print ballot reports	Always
Close Polls	Close the polls to prevent further voting	Polls Open mode
Log Out	Log out the current ClearAccess user role (and return to the ClearAccess Log In screen)	Always
Logs	View the election log and system log	Always
Open Polls	Open the polls and allow voting to begin	Election mode
Re-Open Polls	Return to voting	Postelection mode
Resume Voting	Allow voting to resume	Polls Open mode
Shut Down	Power off the ClearAccess station	Always
Set Options	Configure ballot stubs and serial numbers	Pre-Election mode, Election mode, Postelection mode

4.6   The voter role

The voter role allows voters to make ballot selections on the ClearAccess station. The actual login is performed by a poll worker, not by the voter. For each voter, a poll worker performs a new voter role login.

After logging with the voter role, the poll worker selects:

- The precinct/split that identifies the voter's ballot

- The party (if it is a closed primary election)

If a barcode scanner is being used, the poll worker scans the code, which then automatically triggers the precinct, split, and party selections.

After the precinct/split/party is selected, the voter follows on-screen prompts to vote and print the ballot. Voting and printing the ballot is the only functionality available to a voter.

After printing the ballot, the voter is automatically logged out, the ClearAccess Log In screen appears, and the station is ready for the next voter.

The voter role code is defined in the ClearDesign EMS and is unique for each election.

Chapter 5. ClearAccess election modes

The ClearAccess system has five election modes (Table 5-1). The election mode reflects the state of the election cycle and determines which functions are available to the user roles. For example, in the Pre-election mode, the voting location (vote center) for the station can be specified. In the Polls Open mode, the voter role becomes available to allow voting.

Table 5-1. Election modes

Mode	Description
No Election	This is the mode of a ClearAccess station when an election has not been loaded.
Pre-election	After the election and ballot content are loaded via the ADFx, the station automatically enters the Pre-election mode. Election officials use this mode to test voting functionality before voting begins.
Election	When the pre-election testing is complete, election officials set the station to the Election mode to indicate that the station is ready for the election.
Polls Open	When voting begins, election officials set the station to the Polls Open mode to allow actual voting. During the Polls Open mode, the voter role becomes available.
Postelection	At the end of voting, election officials close the polls. This sets the ClearAccess station to the Postelection mode so that postelection administrative tasks can be performed as required.

5.1 Election timetable

Table 5-2 is a general timetable for the deployment of ClearAccess.

Table 5-2. Timetable for the deployment of ClearAccess

Date	Event	Related Deliverables
45 days or more before the election	State election officials receive software from Clear Ballot for distribution to jurisdictions.	Software
45 days or more before the election	Election officials install software and verify that it is properly installed.	Expected hash code and version information

Table 5-2. Timetable for the deployment of ClearAccess (continued)

Date	Event	Related Deliverables
30 days before the election	Election officials produce election definition in the ClearDesign election management system (EMS) and export the accessible definition file (ADFx).	Completed ADFx
30 to 15 days before the election	Perform logic and accuracy test (L&A) on software and ADFx.	L&A test results

5.2   No Election mode

When no election is loaded on the ClearAccess accessible voting system, it is in the No Election mode. Only the administrator and maintenance roles can access the ClearAccess voting system in the No Election mode. Only the administrator role can load an election.

Table 5-3 lists the functions that are available in the No Election mode.

Table 5-3. No election mode

Function	Description	Access
Open Election	Allows the administrator to select and load an ADFx	Administrator
About	Displays details about the installed ClearAccess and third-party software files	Administrator
Setup	Allows configuration of system date and time, printer, button display, and administrator and maintenance codes	Administrator, Maintenance
Exit	Closes ClearAccess (and returns to the Windows Log In screen)	Administrator
Logs	Displays the system log	Administrator, Maintenance
Shut Down	Powers off the ClearAccess station	Administrator, Maintenance
Log Out	Logs out the current ClearAccess user role (and returns to the ClearAccess Log In screen)	Administrator, Maintenance

5.3 Pre-election mode

When an election is loaded onto the ClearAccess accessible voting system, it is automatically set to the Pre-election mode. One of the most important tasks in preparing for an election is ballot testing, which is performed in the Pre-election mode.

The administrator, election administrator, and maintenance roles can access the ClearAccess voting system in the Pre-election mode. The following functions are available to those user roles in the Pre-election mode:

Table 5-4. Pre-election mode

Function	Description	Access
Test Vote	Tests the system by casting a test vote	Election administrator
Set for Election	Sets the station to the Election mode (after pre-election testing has been completed)	Election administrator
Change Vote Center	Changes to another vote center	Election administrator
Set Options	Allows configuration of ballot stubs and serial numbers	Election administrator
Close Election	Closes the election after all administrative tasks for the election are complete	Administrator Election administrator
Setup	Allows configuration of system date and time, printer, button display, and administrator and maintenance codes	Administrator Maintenance
About	Displays details about the installed ClearAccess and third-party software files	Administrator
Ballot Reports	Displays and prints the Ballot report	Election administrator
Logs	Displays the election log and system log	All roles
Exit	Closes ClearAccess (and returns to the Windows Log In screen)	Administrator
Shut Down	Powers off the ClearAccess station	All roles
Log Out	Logs out the current ClearAccess user role (and returns to the ClearAccess Log In screen)	All roles

When all election preparation tasks, including ballot testing, have been completed, the election administrator sets the ClearAccess station to the Election mode.

5.4 Election mode

When pre-election testing is complete, the election administrator sets the ClearAccess station to the Election mode.

The election administrator, poll worker, administrator, and maintenance roles have access to the functions listed in Table 5-5 in the Election mode.

Table 5-5. Election mode

Function	Description	Role
About	Displays details about the installed ClearAccess and third-party software files	Administrator
Ballot Reports	Displays and prints the Ballot report	Election administrator Poll worker
Close Election	Closes the election after all administrative tasks for the election are complete	Administrator
Exit	Closes ClearAccess (and returns to the Windows Log In screen)	Administrator
Logs	Displays the election log and system log	All roles
Log Out	Logs out the current ClearAccess user role (and returns to the ClearAccess Log In screen)	All roles
Open Polls	Opens the polls and allows voting to begin	Election administrator Poll worker
Shut Down	Powers off the ClearAccess station	All roles
Setup	Allows configuration of system date and time, printer, button display, and administrator and maintenance codes	Administrator Maintenance
Set Options	Allows configuration of ballot stubs and serial numbers	Election administrator Poll worker

5.5 Polls Open mode

Election officials set the ClearAccess voting station to the Polls Open when voting begins on election day (or an early voting day). The voter role is available for voters to make ballot selections in the Polls Open mode.

The election administrator, poll worker, administrator and maintenance roles have access to the functions listed in Table 5-6 in the Polls Open mode.

Table 5-6. Polls Open mode

Function	Description	Access
Resume Voting	Allows voting to resume	Election administrator Poll worker
Close Polls	Closes the polls to prevent further voting	Election administrator Poll worker
Set Options	Allows configuration of ballot stubs and serial numbers	Election administrator Poll worker
Ballot Reports	Displays and prints ballot reports	Election administrator Poll worker
About	Displays details about the installed ClearAccess and third-party software files	Administrator
Setup	Allows configuration of system date and time, printer, button display, and administrator and maintenance codes	Administrator Maintenance
Logs	Displays the election log and system log	All roles
Exit	Closes ClearAccess (and returns to the Windows Log In screen)	Administrator
Shut Down	Powers off the ClearAccess station	All roles
Log Out	Logs out the current ClearAccess user role (and return to the ClearAccess Log In screen)	All roles
Voting	Allows login of the voter role	Voter

5.6   Postelection mode

When election officials close the polls, the ClearAccess station enters the Postelection mode. The Postelection mode lets election officials perform administrative functions related to closing an election.

The election administrator, poll worker, administrator and maintenance roles have access to the functions listed in Table 5-7 in the Postelection mode.

Table 5-7. Postelection mode

Function	Description	Access
Re-Open Polls	Returns to voting after the polls have been closed	Election administrator Poll worker
Ballot Reports	Displays and prints ballot reports	Election administrator Poll worker
Close Election	Closes the election after all administrative tasks for the election are complete	Administrator Election administrator
Setup	Allows configuration of system date and time, printer, button display, and administrator and maintenance codes	Administrator Maintenance
About	Displays details about the installed ClearAccess and third-party software files	Administrator
Logs	Displays the election log and system log	All roles
Exit	Closes ClearAccess (and returns to the Windows Log In screen)	Administrator
Shut Down	Powers off the ClearAccess station	All roles
Log Out	Logs out the current ClearAccess user role (and return to the ClearAccess Log In screen)	All roles

Chapter 6. The Ballot report and logs

This chapter describes the ballot report and logs.

6.1 Logs

All significant operation, configuration and maintenance transactions are posted to one of two logs in the ClearAccess system. Election-specific transactions that occur while an election is loaded are posted to the election log. If no election has been loaded, only the system log is available. System-specific transactions are posted to the system log during ClearAccess usage, whether an election has been loaded or not.

Every ClearAccess transaction is posted to either the system log or the election log with the following information:

- Date/time—the date and time of the transaction
- Severity—the severity level of the transaction
- User—the role of user responsible for the transaction
- Message—a description of the transaction
- Validated—the validation status of the transaction is one of the following:
    - Validated
    - Invalid HMAC
    - ERROR: <text describing an exception>

The election log also includes the following:

- State—Election mode transaction has occurred in
- Session—Iteration of voting session in current election mode
- Ballot name—Identifier of ballot type voted
- Split name—Identifier of precinct split voted
- Precinct name—Identifier of precinct voted

Log entries appear in chronological order with each line representing a unique transaction. Log entries are automatically generated by the ClearAccess system and cannot be altered by the user.

The status of every ballot voted is posted to the election log, including ballot identification information and print status. However, no information is included pertaining to voter identification, ballot selections, or the assistive device used to vote with.

Any user in any election mode can access the logs by tapping **Logs**. To display the election log or system log, tap the button with the corresponding name.

6.2   Ballot report

The Ballot Report can be viewed and printed in the Pre-election and the Postelection modes and provides comprehensive status information for the voting location. This report automatically displays when the polls are opened and when the polls are closed. The Ballot Report includes the following information:

- System identification information
- Voting location identification information
- Media identification and verification information
- Special voting rules
- Ballot-marking statistics by precinct, party and split
    - Number of ballots voted in the voting session that were printed
    - Number of ballots voted in the voting session that were reprinted
    - Number of ballots voted in the voting session that were canceled
- Statistics on test ballots voted in the most recent voting session in the Pre-election mode
- Zero ballot counts when opening the polls
- Statistics on official ballots voted when polls are closed as well as in the Postelection mode

See Table 6-1 for a list of information provided in the report and the following figure for an example.

Figure 6-1. Ballot report

Table 6-1. Information on the Ballot Report

Item	Description
Report title	Name of the report
Software	ClearAccess software
Version	Version of installed ClearAccess software
Election	Currently installed election
Date	Election date
Vote Center	Current voting location
Media Version	The version of the election data
Copy	The copy number of the media
Media Hash	Hash of currently installed election
Warn Undervote	Indicates whether a warning appears when a voter attempts to undervote a contest.
Straight Party Type	Straight-party voting rule
Warn Blank Vote	Indicates whether a warning appears when a voter attempts to blank vote a contest.
Warn Straight Party Change	Indicates whether a warning appears when a voter attempts to change the straight-party selection in a contest.
Voting Sessions	Number of total voting sessions for the current election
Sessions	The number of voting sessions for each ballot type listed
Printed	The number of ballots printed for each ballot type.
Reprinted	The number of ballots reprinted for each ballot type.
Canceled	The number of ballots canceled for each ballot type.

Chapter 7. Installing and configuring the Oki Data printers

This chapter describes how to install the Oki Data B432dn and Oki Data B432dn-B printers used with ClearAccess. The installation and configuration processes are the same for both printers.

Before you load an election, make that the printers are installed and configured as described in this chapter.

Estimated time to complete: 30 minutes

7.1 Preparing the printer for installation

To prepare the printer for installation:

1. Unpack the printer.

2. (If necessary) Install the toner in the printer.

3. Review the paper requirements in the *ClearVote Ballot Stock and Printing Specification*.

4. To print sheets larger than 14 inches from tray 1, install the paper tray extender.

5. Put paper in the input tray.

6. Connect the printer to AC power.

Note:	Do *not* turn on the printer or connect it to the ClearAccess station until told to do so in "Installing the drivers for the Oki Data printer" on the next page.

7.2 Operating features of the Oki Data printer

This section describes the supported ballot sizes and duplex printing on the Oki Dat B432dn and Oki Data B432dn-B printers.

7.2.1 Supported ballot sizes

The Oki Data B432dn and Oki Data B432dn-B printers support the following size ballots:

- Width: 8.5 inches
- Length: 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21 and 22 inches

Out of the box, the printers automatically print ballots that are 11 and 14 inches long. Depending on the printer driver used, you can configure additional paper sizes. See "Configuring custom paper sizes" on page 51.

7.2.2 Print tray and duplexing support

All ballot printing uses tray 1. Printing is automatically duplexed (two-sided).

7.3 Installing the drivers for the Oki Data printer

Note: Do not turn on the printer or connect it to the ClearAccess station until instructed to do so in the following steps.

To install the Election Printer driver:

1. Insert the ClearAccess Application and Printer Drivers DVD into the DVD drive.

2. Open File Explorer and navigate to the Printer Drivers folder on the DVD.

3. Extract both Oki Data B423n Driver and Oki Data B432n Driver Update folders by copying and pasting the folders onto the computers Desktop.

4. On the desktop, open the Oki B432dn Driver folder and double click on the B432dn Driver application to start the installation.

    Windows displays the prompt:

    Do you want to allow this app to make changes to your device?

5. Click **Yes**.

6. When the installer displays the license agreement, click **Accept**.

7. When the installer displays the Pre-installation check dialog, click **Next**.

8. In the Choose installation type dialog, select **Easy Installation (Local)**.

9. In the Installation settings dialog, select **OKI B432(PCL6)** and click **Next**.

10. If a message appears stating "Would you like to install this device software?", select **Install**.

11. When prompted, use a USB cable to connect the printer to the ClearAccess station and turn on the printer.

12. Record the location of the USB port on the ClearAccess station where you connected the printer on the Installation checklist.

13. If a message appears stating that an operation could not complete because an element was not found, click **OK**.

    This message is normal during the installation of some printer models.

14. When the Install Result dialog shows *Success* as the status, click **Finish**.

To install the Elections printer driver update, allowing the printer to print up to 22 inches:

15. On the desktop, open the Oki B432dn Driver Update folder and right click on ElectionSetup batch file, select **Run as Administrator**.

16. A command line will appear stating "Are you sure to start setup? (Y/N)", **type in Y then press enter** to start the installation of the printer driver update.

17. After the installation is complete, power cycle the EloPOS so the driver(s) take effect.

18. Delete extracted files/ folders related to printer drivers from the desktop.

19. Shut off the Multi-purpose tray on the printer by navigating through the settings on the printer LCD. **Menus → Tray Config → MP Tray → Tray Usage = Do Not Use**.

7.4   Setting the Media Weight

To ensure that ballots print cleanly on heavy stock, follow these steps to configure the Media Weight setting on the printers:

1. On the printer control panel, press the Down arrow until the Menus option displays.

2. Press **OK**.

   The Tray Config option displays.

3. Press **OK** and then press the Down arrow until the Tray 1 Config option displays.

4. Press **OK** and then press the Down arrow until the MediaWeight option displays.

   By default, the MediaWeight is Medium.

5. Press **OK**.

   The MediaWeight setting begins to blink.

6. Use the Down arrow to select **Heavy** and then press **OK** to confirm that setting.

   Regardless of the paper weight, always set the MediaWeight to Heavy.

7. Use the Return button to return to the Menus option.

7.5   Configuring custom paper sizes

Out of the box, the Oki Data B432dn and Oki Data B432dn-B printers can print ballots that are 11 and 14 inches long. Depending on the printer driver, additional paper lengths can be configured.

To determine which paper sizes are configured, access the printer's Printing Preferences dialog and check the Size drop-down list.

To set up printing for a ballot length that is not already configured, follow these steps to define a custom paper size:

1. Log in to the ClearAccess station as the Windows administrative user.

2. Click the Windows **Start** button and then type *printers*.

3. Select **Printers & scanners** from the search results.

    Windows displays the Printers & scanners dialog.

4. Under Printers & Scanners, click **OKI B432**, then click **Manage**.

    Windows displays the Manage your device dialog.

5. Click **Printing preferences**.

    Windows displays the Oki B432 Printing Preferences dialog.

6. Click **Paper Feed Options** > **Custom Size**.

    The Custom Size dialog opens.

7. On the Custom Size dialog, do the following:

    a. Enter a Name.

    b. Set the Unit as **inch**.

    c. Specify the Length.

    d. Keep the Width as 8.50 inches.

        ClearAccess does not support any widths other than 8.50.

8. Click **Add** and then **OK** to close the dialog.

9. Click **OK** to close the Paper feed options and Printing preferences dialogs.

Chapter 8. Installing and configuring the Lexmark MS521dn printer

This chapter describes how to install the Lexmark MS521dn printer used with ClearAccess.

Before you load an election, make sure that the printer is installed and configured as described in this chapter.

Estimated time to complete: 25 minutes

8.1 Preparing the printer for installation

To prepare the printer for installation:

1. Unpack the printer.

2. (If necessary) Install the toner in the printer.

3. Review the paper requirements in the *ClearVote Ballot Stock and Printing Specification*.

4. Put paper in the input tray.

5. Connect the printer to AC power.

8.2 Operating features of the Lexmark MS521dn printer

This section describes the supported ballot sizes and duplex printing on the Lexmark MS521dn printer.

8.2.1 Supported ballot sizes

The Lexmark MS521dn printer supports the following size ballots:

- Width: 8.5 inches
- Length: 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21 and 22 inches

Out of the box, the printer automatically prints ballots that are 11, 13, and 14 inches long. You can configure additional paper sizes. See "Configuring custom paper sizes for the Lexmark MS521dn printer" on page 60.

8.2.2 Print tray and duplexing support

All ballot printing uses tray 1. Printing is automatically duplexed (two-sided).

8.3   Installing the Lexmark MS521dn printer driver

To install the Lexmark MS521dn printer driver:

1. Log in to the ClearAccess computer as the Windows administrative user. Ensure the Lexmark MS521dn printer is not connected to the computer at this time.

2. Use File Explorer to navigate to the following location on the installation media:

   2-Print Drivers\3-Lexmark_ms521dn Driver\Lexmark_Universal_v2_UD1_PostScript_ 07062021.exe

3. Double-click **Lexmark_Universal_v2_UD1_PostScript_07062021.exe**.

   Windows displays the message:

   Do you want to allow this app to make changes to your device?

4. Click **Yes**.

   The Windows PostScript System Driver dialog appears displaying the Lexmark License Agreement (Figure 8-1).
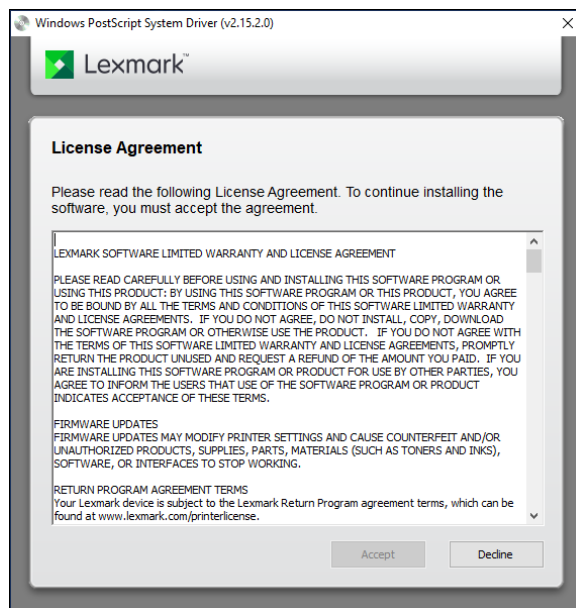

Figure 8-1. Lexmark license agreement

5. Scroll to the bottom of the license agreement and click **Accept**.

   The Windows PostScript System Driver dialog asks you to select an installation type (Figure 8-2).
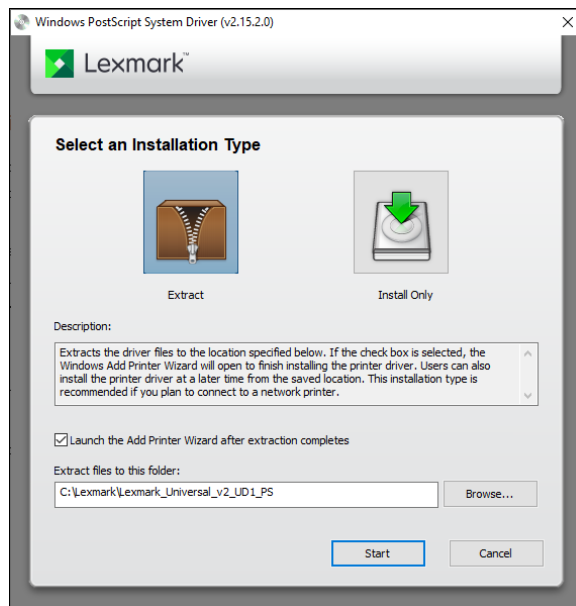

Figure 8-2. Select an installation type

6. Click **Install Only** and then click **Start**.

   The printer driver is installed, and the Windows PostScript Driver dialog automatically closes.

7. Power on the Lexmark MS521dn printer and connect it to the computer via a USB cable. The printer will automatically be detected by the computer and configured to work with the previously installed driver.

8. To verify that the printer driver has been properly configured:

   a. Click the Start button on the Windows taskbar, search for and select **Printers & scanners**.

      Windows displays the Printers & scanners dialog.

   b. Ensure that "Lexmark Universal v2 PS3" is listed on the Printers & scanners list.

   c. Click **Lexmark Universal v2 PS3** and then click **Manage**.

      The Manage your device dialog appears.

   d. Click **Print a test page** to verify that the printer driver has been properly configured.

8.4 Setting the printer model for the Lexmark MS521dn printer

Once the Lexmark printer driver has been installed, you must set the correct printer model on the Printer properties dialog.

To set the correct printer model:

1. Log in to the ClearAccess computer as the Windows administrative user.

2. Click the Start button on the Windows taskbar, search for and select **Printers & scanners**.

   Windows displays the Printers & scanners dialog.

3. Click **Lexmark Universal v2 PS3**. Then, click **Manage**.

   Windows displays the Manage your device dialog.

4. Click **Printer Properties**.

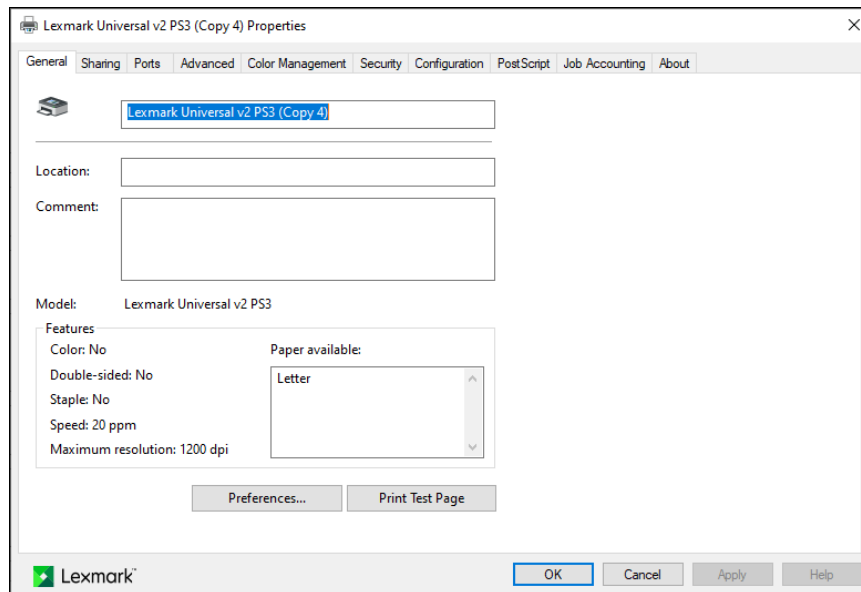   Windows displays the Lexmark Universal v2 PS3 Properties dialog (Figure 8-3).

Figure 8-3. Lexmark Universal v2 PS3 Properties dialog

5. Click the **Configuration** tab.

   The dialog displays a set of printer configuration options.

6. Click **Set Printer Model**.

    The Set Printer Model dialog appears (Figure 8-4).
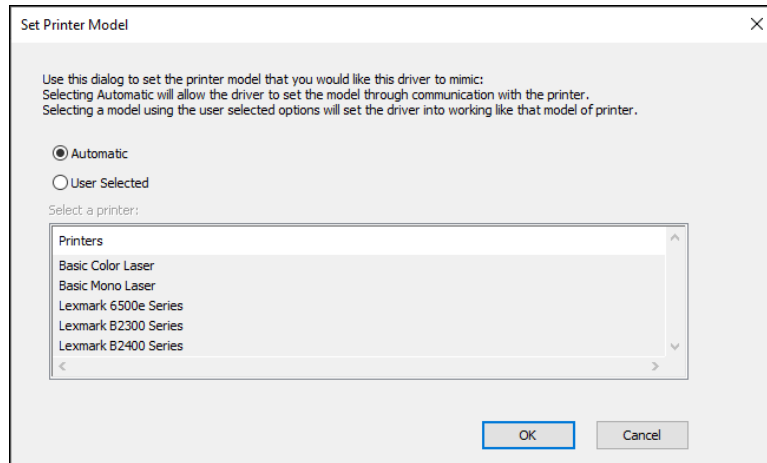
Figure 8-4. Set Printer Model dialog

7. Click **User Selected**. On the Select a printer list, select **Universal Mono Laser**.

8. Click **OK** and then click **OK** again to close the Set Printer Model and Lexmark Universal v2 PS3 Properties dialogs.

8.5   Changing the printer settings for the Lexmark MS521dn printer

To ensure that the highest quality ballots are printed from the Lexmark MS521dn printer, the default printer settings must be changed.

To change the default printer settings:

1. Log in to the ClearAccess computer as the Windows administrative user.

2. Click the Start button on the Windows taskbar, search for and select **Printers & scanners**.

    Windows displays the Printers & scanners dialog.

3. Click **Lexmark Universal v2 PS3**. Then, click **Manage**.

    Windows displays the Manage your device dialog.

4. Click **Printing preferences**.

    Windows displays the Lexmark Universal v2 PS3 Printing Preferences dialog with the Layout tab selected (Figure 8-5).
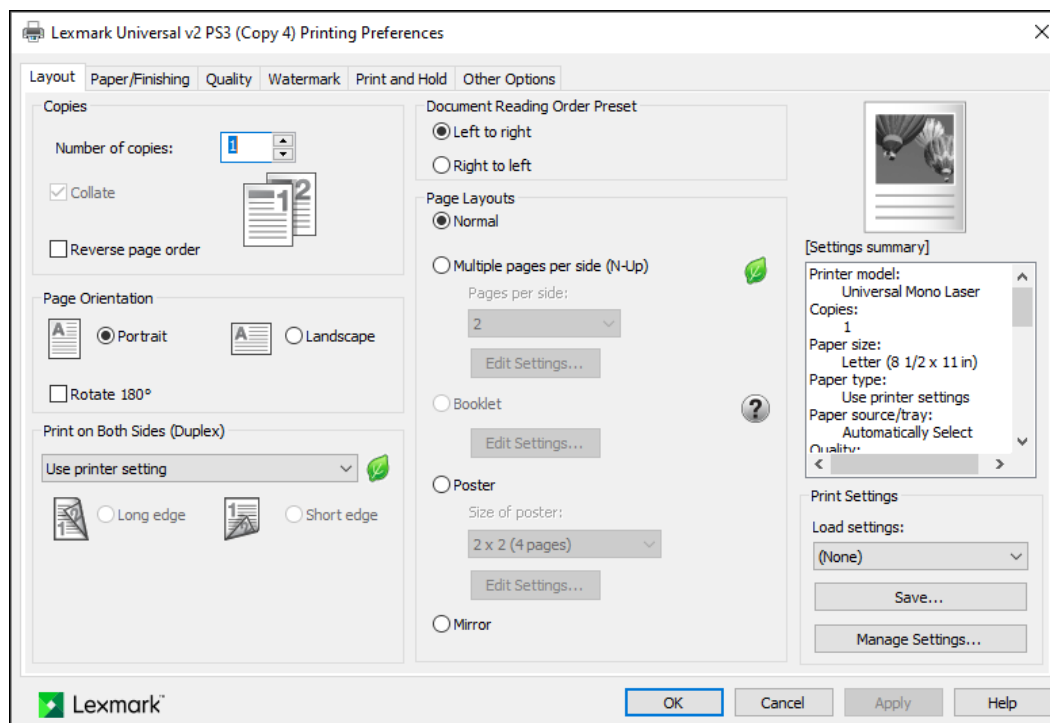

Figure 8-5. Lexmark Universal v2 PS3 Printing Preferences dialog

5. On the Layout tab, choose the following options:

    a. Under Page Orientation, select **Portrait**.

    b. From the Print on Both Sides (Duplex) drop-down list, select **Use printer setting**.

    c. Under Document Reading Order Preset, select **Left to right**.

    d. Under Page Layouts, select **Normal**.

6. Click the **Paper/Finishing** tab and choose the following options:

    a. From the Other paper size with different orientation drop-down list, select **Off**.

    b. From the Paper type drop-down list, select **Heavy**.

    c. From the paper source/tray drop-down list, select **Automatically select**.

    d. Ensure the Use multiple input options box is unchecked.

    e. On the Output Bin list, select **Use printer setting**.

    f. From the Separator sheet source drop-down list, select **Use printer settings**.

7. Click the **Quality** tab and choose the following options:

    a. Under Toner Darkness, select **Use toner darkness**.

        Use the slider to set the toner darkness value to **2**.

    b. From the Pixel Boost drop-down list, select **Use printer setting**.

    c. From the Resolution drop-down list, select **600 dpi**.

    d. From the Halftone drop-down list, select **Use printer setting**.

    e. From the Gray Correction drop-down list, select **Use printer setting**.

8. Click **Apply** and then click **OK** to close the Lexmark Universal v2 PS3 Printing Preferences dialog.

8.6 Adjusting the margins for the Lexmark MS521dn printer

To ensure that printed ballots are properly aligned, you must adjust the margins on the Lexmark MS521dn printer. To adjust the margins, use the buttons on the operator panel. The operator panel is on the top of the printer in the lower left corner. Figure 8-6 shows the operator panel.
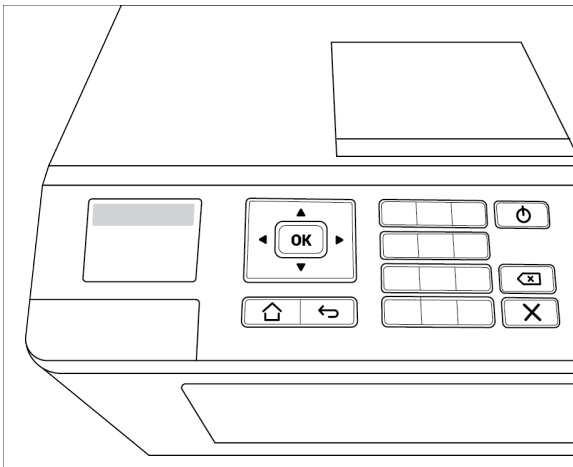
Figure 8-6. Lexmark MS521dn printer operator panel

To adjust the printer margins:

1. On the operator panel keypad, type ****36**.

    The Diagnostics menu appears.

2. Press the Down arrow until Printer diagnostics & adjustments is selected and press **OK**.

    The Printer diagnostics & adjustments menu appears.

3. Press the Down arrow until Registration adjust is selected and press **OK**.

    The Registration adjust menu appears.

4. Press the Down arrow until Top margin is selected and press **OK**.

    The Top margin menu appears.

5. On the operator keypad, type **15** to set the top margin to 15. Press **OK** to submit the change.

    The Registration adjust menu reappears.

6. Repeat steps 4 and 5 to select and set the following margins on the printer:

    a. Bottom margin = 0

    b. Left margin = 0

    c. Right margin = 15

    d. Left Skew = 0

    e. Duplex top margin = 9

    f. Duplex left margin = 0

7. When all margins have been set, press the **Home** button to return to the main menu.

8.7   Configuring custom paper sizes for the Lexmark MS521dn printer

Out of the box, the Lexmark MS521dn printer can print ballots that are 11, 13, and 14 inches long. Additional paper lengths can be configured by accessing the printer's Printing Preferences dialog.

To set up printing for a ballot length that is not already configured, follow these steps to define a custom paper size:

1. Log in to the ClearAccess computer as the Windows administrative user.

2. Click the Start button on the Windows taskbar, search for and select **Printers & scanners**.

    Windows displays the Printers & scanners dialog.

3. Click **Lexmark Universal v2 PS3**. Then, click **Manage**.

    Windows displays the Manage your device dialog.

4. Click **Printing preferences**.

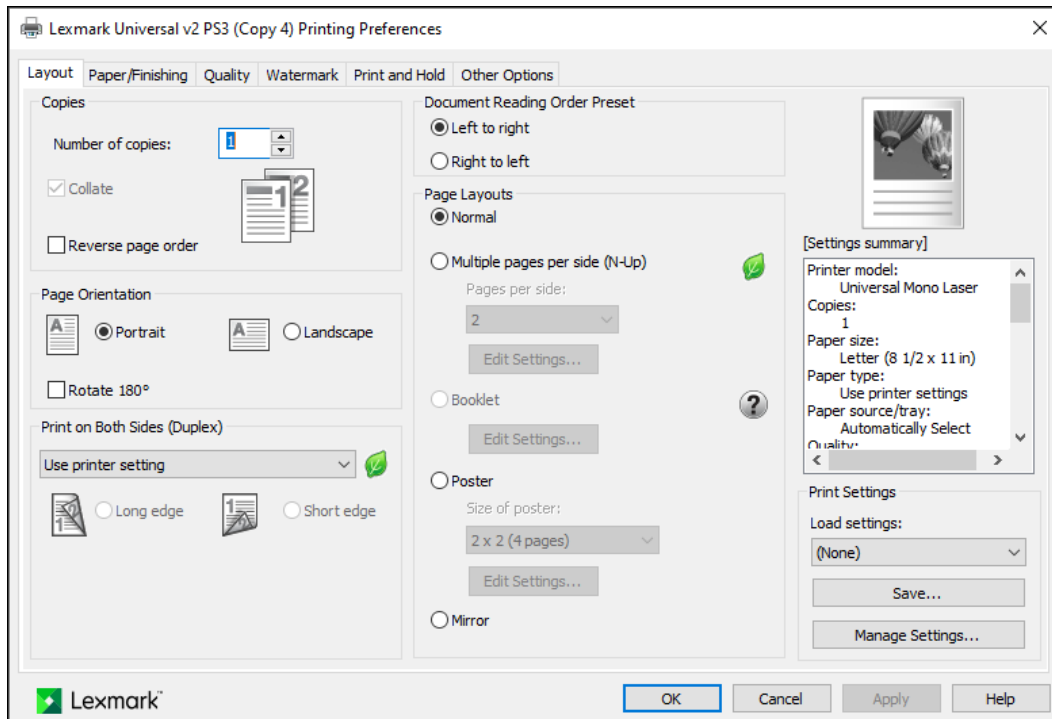Windows displays the Lexmark Universal v2 PS3 Printing Preferences dialog (Figure 8-7).

Figure 8-7. Lexmark Universal v2 PS3 Printing Preferences dialog

5. Click the **Paper/Finishing** tab.

The Printing Preferences dialog displays a list of paper and finish settings.

6. Click **Manage Custom Sizes**.
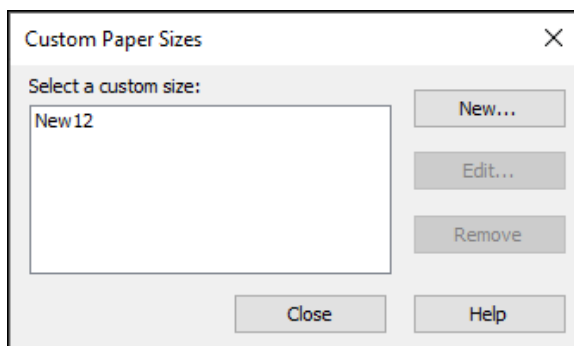
The Custom Paper Sizes dialog appears (Figure 8-8).

Figure 8-8. Custom Paper Sizes dialog

7. Click **New**.

The New Custom Paper Size dialog appears (Figure 8-9).

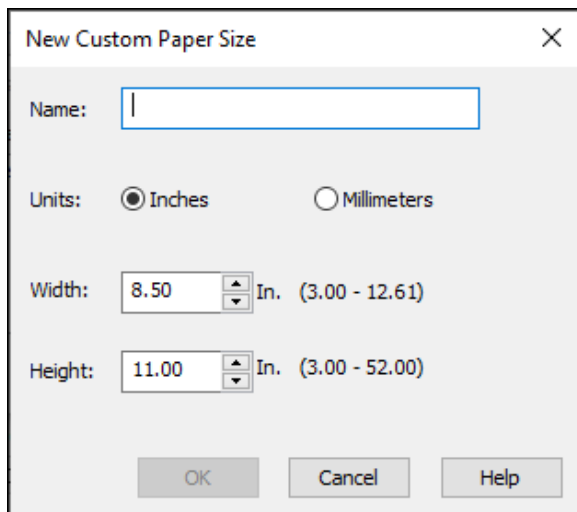**Figure 8-9. New Custom Paper Size dialog**

8. To define a custom paper size:

    a. In the **Name** field, enter a name for the custom paper size.

    b. Select **Inches** as the Unit.

    c. Set the Width to 8.5 inches

      ClearAccess does not support any widths other than 8.50.

    d. Specify the desired Height (this is the Length of the ballot).

    e. Click **OK** to close the New Custom Paper Size dialog.

9. Repeat steps 7 and 8 to continue defining additional custom paper sizes.

10. When all desired custom paper sizes have been defined, click **Close** to close the Custom Paper Sizes dialog.

Your newly configured custom paper sizes are now available on the Paper size drop-down list in the Lexmark Universal v2 PS3 Printing Preferences dialog.

8.8 Adjusting the paper tray for the Lexmark MS521dn printer

The Lexmark MS521dn printer is capable of printing ballots up to 22 inches long. You can adjust the printer's paper tray to hold paper of any length between 11 and 22 inches. The paper tray contains a LTR clip that is inserted when paper with a length between 11-15 inches is used. The LTR clip is removed when paper with a length between 16-22 inches is used. Figure 8-10 shows the Lexmark MS521dn adjustable paper tray fully collapsed with the LTR clip inserted.
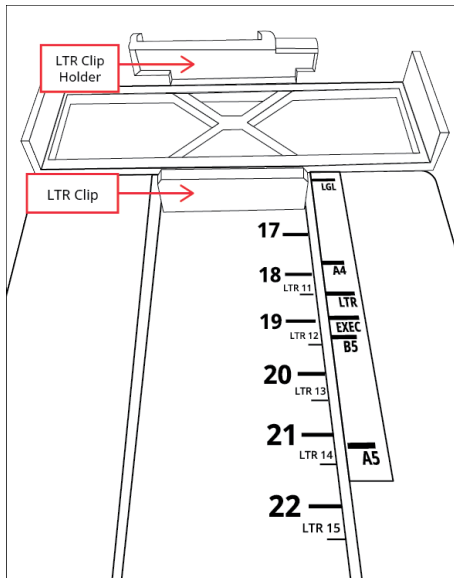
Figure 8-10. Lexmark MS521dn adjustable paper tray – fully collapsed

Adjusting the paper tray for 11-15 inch paper lengths

To adjust the paper tray for lengths between 11 and 15 inches:

1. Insert the LTR clip into the paper tray and ensure the adjustable portion of the tray is fully collapsed as shown in Figure 8-10 above.

2. On the adjustable portion of the tray, locate the engraved lines that indicate how to adjust the tray for paper lengths between 11 and 15 inches. These lines are labeled LTR11, LTR12, LTR13, LTR14, and LTR15.

3. Slowly pull out the adjustable portion of the tray until the white LTR line on the right of the tray is aligned with the engraved line for the desired paper length. Figure 8-11 shows an example of how to properly align the tray when using 13 inch paper.
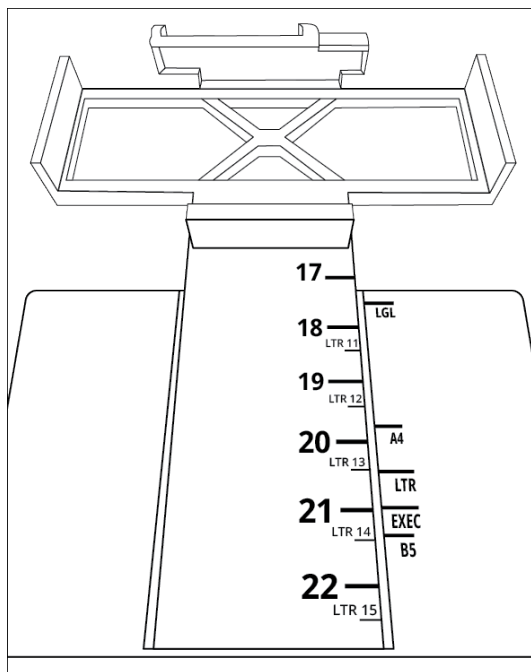
Figure 8-11. Lexmark MS521dn adjustable paper tray – aligned for 13 inch paper

4. Insert paper of the desired length into the tray.

Adjusting the paper tray for 16-22 inch paper lengths

To adjust the paper tray for lengths between 16 and 22 inches:

1. Remove the LTR clip and place it in the LTR clip holder at the back of the paper tray. Ensure the adjustable portion of the tray is fully collapsed.

2. On the adjustable portion of the tray, locate the engraved lines that indicate how to adjust the tray for paper lengths between 16 and 22 inches. These lines are labeled 16, 17, 18, 19, 20, 21, and 22.

3. Slowly pull out the adjustable portion of the tray until the white LGL line on the right of the tray is aligned with the engraved line for the desired paper length.

4. Insert paper of the desired length into the tray.

Chapter 9. Setting up the ClearAccess station

The location for the ClearAccess voting station must conform to the electrical and environmental requirements of the system components. See the documentation from the manufacturer for more information.

9.1   Setting up ClearAccess in a tabletop configuration with Elo Touchscreens

Prepare each ClearAccess station for voting as follows:

1. Unpack the ClearAccess touchscreen computer, printer, accessible keypad, headphones, and related supplies. Also unpack the sip-and-puff device and barcode scanner if they will be used.

2. Arrange the voting station components as follows:

   a. Position the ClearAccess components in the voting space to ensure access voters who use wheelchairs.

   b. Position the accessible keypad on one side of the ClearAccess station.

   c. (If used) Position the sip-and-puff device on the other side of the station.

   d. (If used) Position the barcode scanner.

   Figure 9-1 shows the ClearAccess equipment in the tabletop configuration.
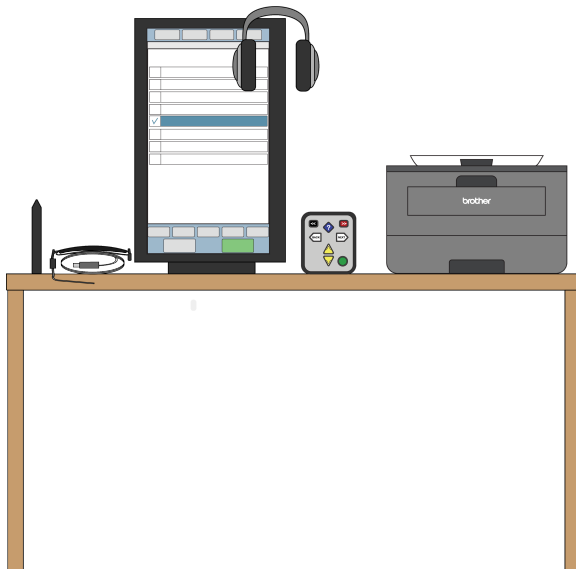
Figure 9-1. ClearAccess equipment in the tabletop configuration

3. Verify and record the tamper-evident seals on the touchscreen computer.

4. Ensure the following activity is witnessed:

   a. Remove the tamper-evident seals from the touchscreen computer and remove the port cover plate. (If present, first remove the screw securing the cover plate.)

   b. Connect the printer and accessible keypad to the touchscreen with the USB cables.

   c. Plug in the audio headphones.

   d. Connect the touchscreen's power cord.

   e. (If used) Connect the sip-and-puff device and barcode screen using USB cables.

   f. Replace the port cover plate and secure it with the screw, if it includes one.

   g. Apply tamper-evident seals to the cover plate edges or over the securing screw (and record the seals (Figure 9-2 through Figure 9-4).
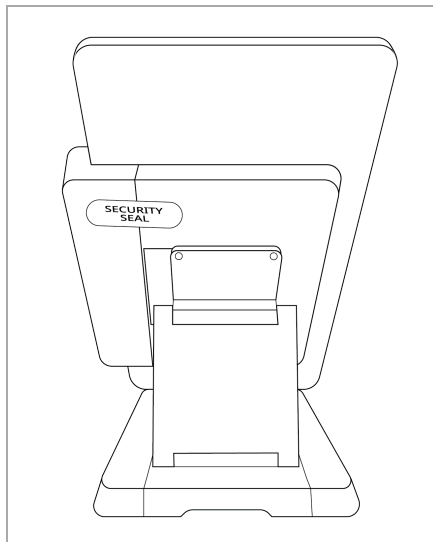
Figure 9-2. Elo X with security seal   **Figure 9-3. Elo E with security seals**
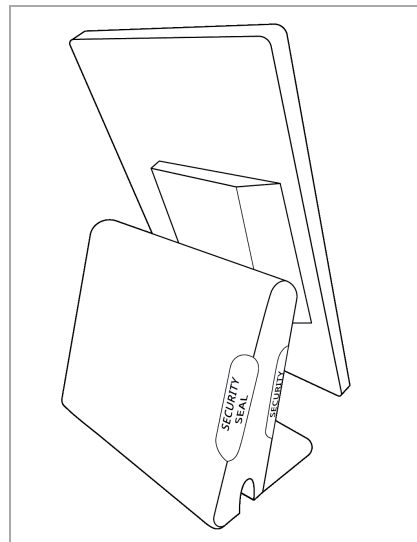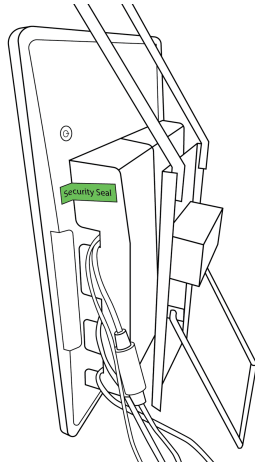
Figure 9-4. EloPOS with security seal

5. Prepare the printer:

    a. Install the image drum with the toner cartridge in the printer, if it was shipped separately.

    b. Open the printer input and output trays.

    c. Count the designated number of blank sheets of paper and load them in the printer.

    d. Record the number of sheets loaded.

6. Prepare the power connections:

    a. Plug the power cords for the touchscreen and printer into the UPS.

    b. Plug the UPS into the designated power outlet. Use extension cords if necessary.

    c. Stabilize the power cords with the rubber matting provided.

7. Power on the ClearAccess station and printer.

8. For the Elo X Series touchscreen, apply a tamper-evident seal over the rubber flange that covers the two USB ports on the bottom of the computer, and record the seal.

9. Place the voting screen around the ClearAccess station to ensure comfort and privacy.

9.2   Setting up ClearAccess in the setup box configuration with the Oki Data printer and CyberPower UPS

> ⚠️ **Caution**: When lifting the ClearAccess setup box, always lift with two people. Each person must use two handles to distribute the weight evenly.

For ClearAccess voting stations that use Oki Data printers, prepare each station for voting as follows:

1. Open the rear door of the unit by rotating the butterfly latch to the left.

2. Unwrap the CyberPower power cord from the cable-management hooks.

3. Feed the power cord through the hole located on the right side of the ClearAccess setup box.

4. Plug in the power cord of the ClearAccess setup box into a 15A 120V outlet.

5. Open the lower door by rotating the butterfly latch to the left (Figure 9-5).

    You can now open the door to expose the printer and uninterrupted power supply.
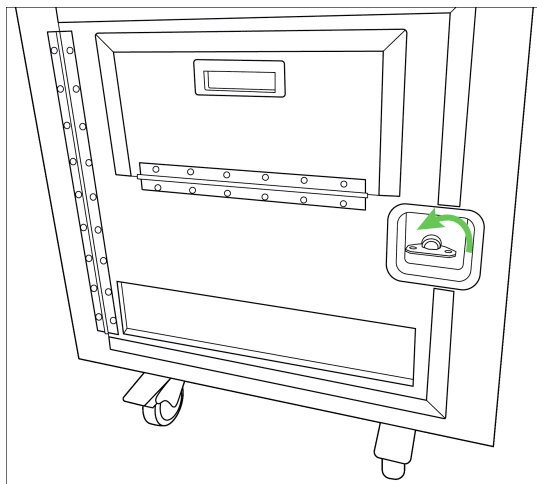
Figure 9-5. Turning the butterfly latch to the left to open the lower door

6. Turn on the CyberPower UPS by pressing the large power button then pressing the **Enter** button (Figure 9-6).
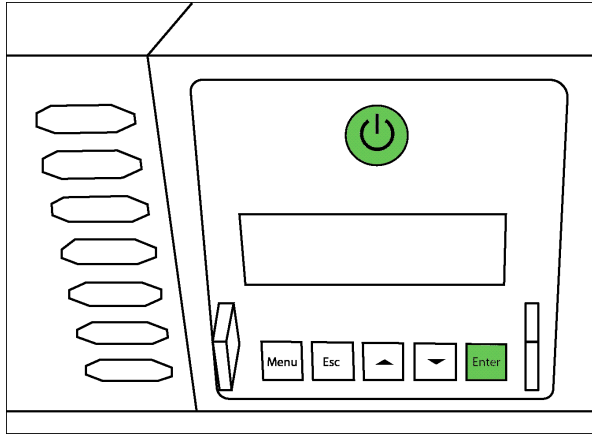
Figure 9-6. Power button on the CyberPower UPS

7. To power on the printer, press and hold the power button (Figure 9-7).
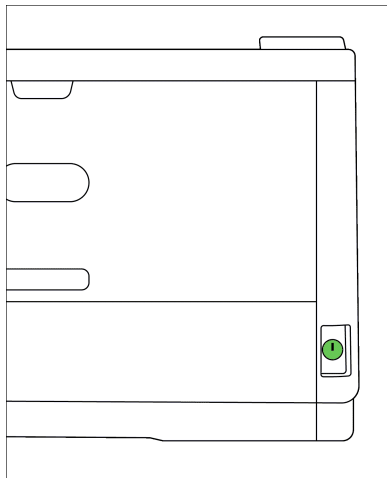
Figure 9-7. Power button on the printer

8. Close the lower front door by rotating the butterfly latch to the right (Figure 9-8). Replace any desired tamper evident seals.
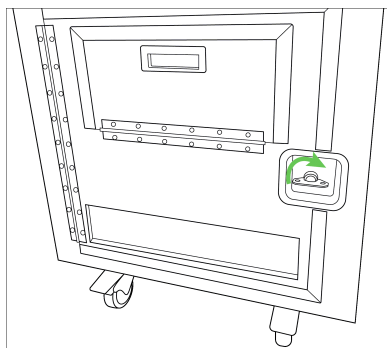
Figure 9-8. Turning the butterfly latch to the right to close the lower door

9. Open the small hatch located on the lower door by using the designated handle exposing the top of the printer (Figure 9-9).
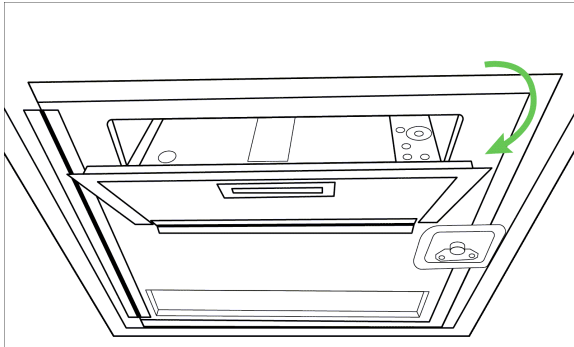
Figure 9-9. Opening the hatch on the lower door to expose the top of the printer

10. Open the top compartment by rotating both butterfly latches to the left (Figure 9-10). Next use the front facing handle to flip open the top compartment, exposing the touchscreen monitor, keypad, headphones, and sip-n-puff.

Figure 9-10. Opening the top compartment door

11. Move the touchscreen monitor into its most upright position by grabbing the handle and pulling towards you. The stand should click into the desired position (Figure 9-11).

> ⚠️ **Caution**: Pinch point. Be aware of your hand position when opening and closing the kickstand.
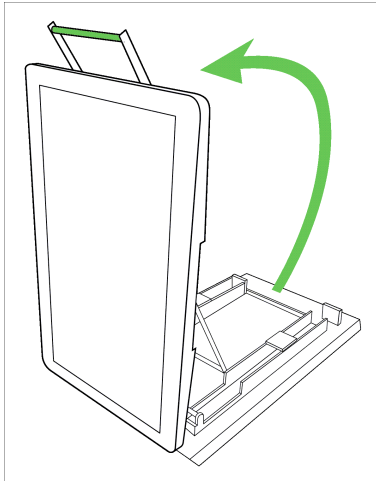
Figure 9-11. Moving the touchscreen into an upright position

12. If the touchscreen monitor is not already powered on, turn it on by pressing the power button located on the back right side of the monitor (Figure 9-12).
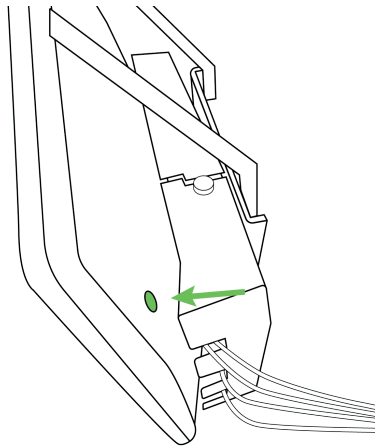
Figure 9-12. Pressing the power button on the touchscreen

9.3   Setting up ClearAccess in the setup box configuration with the Lexmark printer and APC UPS

> ⚠️ **Caution**: When lifting the ClearAccess setup box, always lift with two people. Each person must use two handles to distribute the weight evenly.

For ClearAccess voting stations that use Lexmark printers, prepare each station for voting as follows:

1. Open the rear door of the unit by rotating the butterfly latch to the left.

2. Unwrap the APC power cord from the cable-management hooks.

3. Feed the power cord through the hole located on the right side of the ClearAccess setup box.

4. Plug in the power cord of the ClearAccess setup box into a 15A 120V outlet.

5. Open the lower door by rotating the butterfly latch to the left (Figure 9-13).

    You can now open the door to expose the printer and uninterrupted power supply.
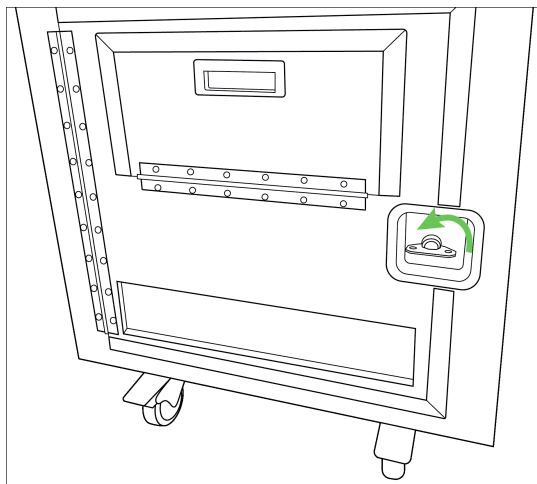
Figure 9-13. Turning the butterfly latch to the left to open the lower door

6. Turn on the APC UPS (Figure 9-14):

    a. Press the power button.

    b. Press the **OK** button and select **Turn on immediately**.
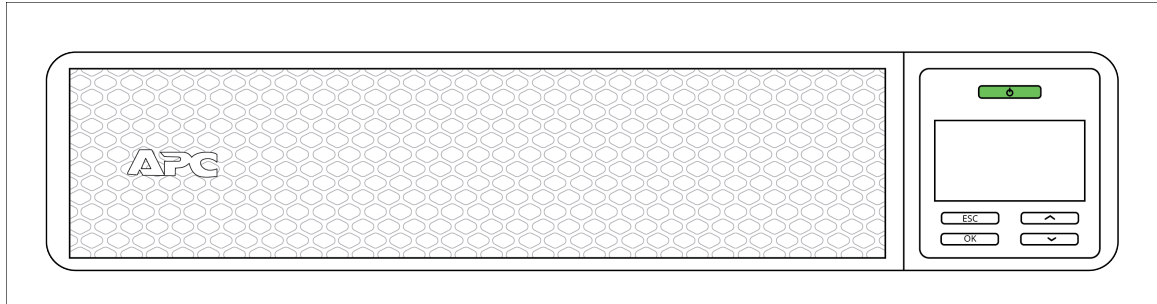
Figure 9-14. Power button on the APC UPS

7. To set up the UPS, set **Go into Bypass** for the Bypass Control option. To set this option, do the following on the UPS:

    a. Click the **OK** button.

    b. Under the Main menu, select the **Control** option.

    c. Under the Control menu, select the **Bypass Control** option.

    d. Under the Bypass Control option, select **Go to Bypass**.

8. To turn on the printer, press and hold the power button (Figure 9-15).
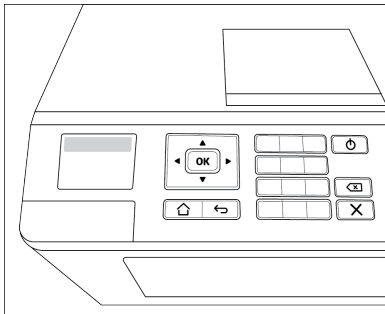
Figure 9-15. Power button on the printer

9. Close the lower front door by rotating the butterfly latch to the right (Figure 9-16). Replace any desired tamper evident seals.
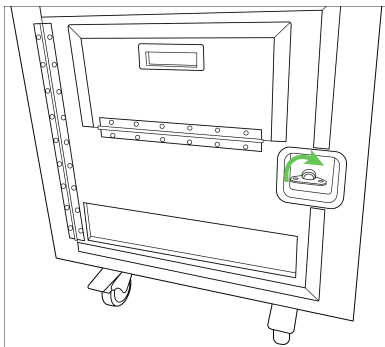
Figure 9-16. Turning the butterfly latch to the right to close the lower door

10. Open the small hatch located on the lower door by using the designated handle exposing the top of the printer (Figure 9-17).
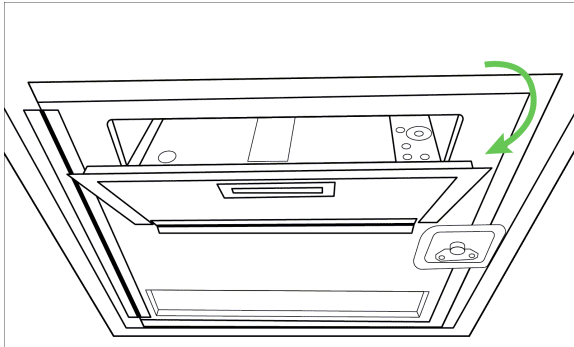
Figure 9-17. Opening the hatch on the lower door to expose the top of the printer

11. Open the top compartment by rotating both butterfly latches to the left (Figure 9-18). Next use the front facing handle to flip open the top compartment, exposing the touchscreen monitor, keypad, headphones, and sip-n-puff.
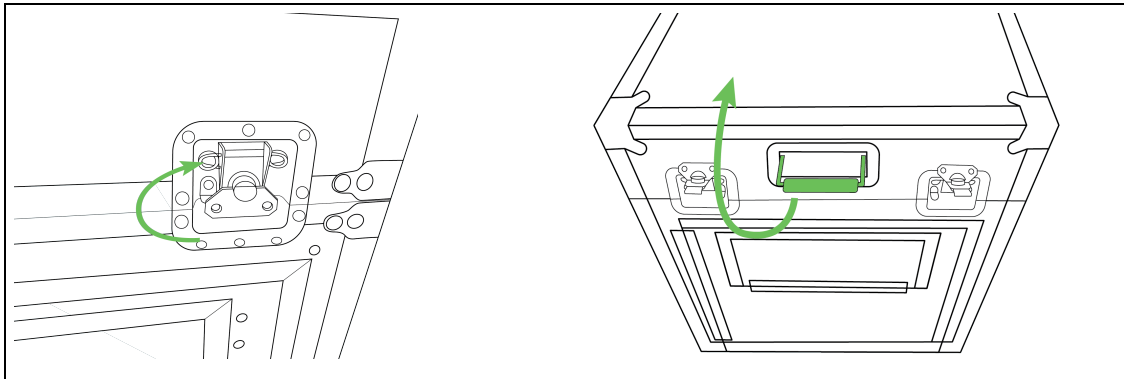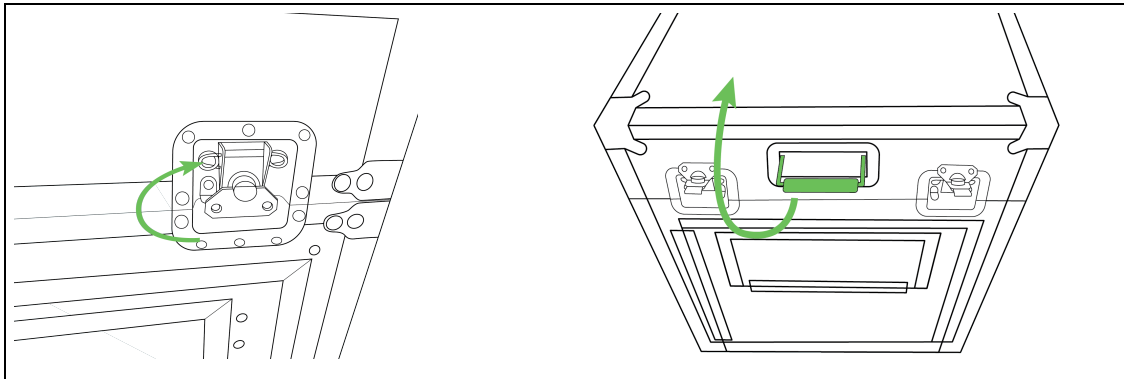

Figure 9-18. Opening the top compartment door

12. Move the touchscreen monitor into its most upright position by grabbing the handle and pulling towards you. The stand should click into the desired position (Figure 9-19).

> ⚠️ **Caution**: Pinch point. Be aware of your hand position when opening and closing the kickstand.
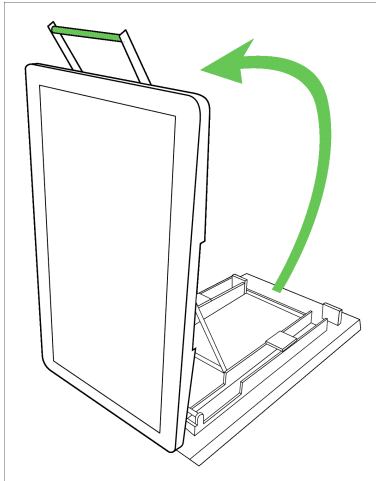
Figure 9-19. Moving the touchscreen into an upright position

13. If the touchscreen monitor is not already turned on, press the power button located on the back right side of the monitor (Figure 9-20) to turn on the monitor.
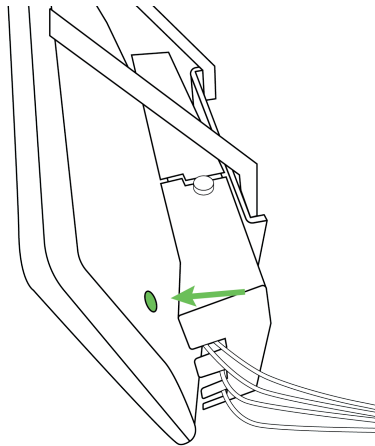
Figure 9-20. Pressing the power button on the touchscreen

9.4 Setting up ClearAccess in a tabletop configuration with Dell touchscreens

Prepare each ClearAccess station for voting as follows:

1. Unpack the ClearAccess touchscreen computer, printer, accessible keypad, headphones, and related supplies. Also unpack the sip-and-puff device if it will be used.

2. Arrange the voting station components as follows:

   a. Position the ClearAccess components in the voting space to ensure access for voters who use wheelchairs.

   b. Position the accessible keypad on one side of the ClearAccess station.

   c. Position the sip-and-puff device (if used) on the other side of the station, as shown in the following figure.
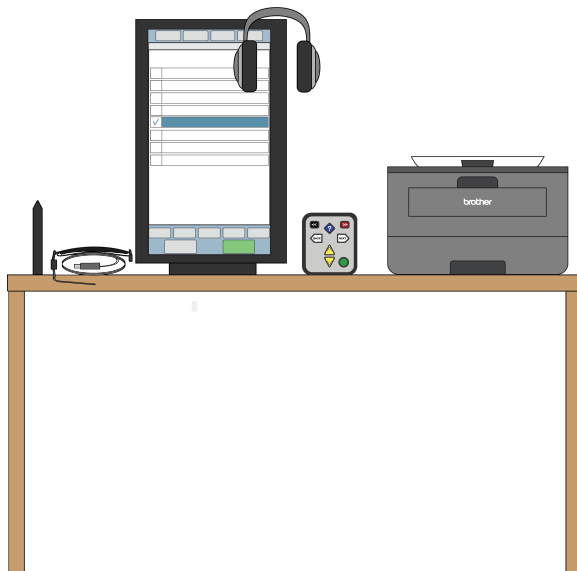
Figure 9-21. Sip-and-Puff position

3. Verify and record the tamper-evident seals on the touchscreen computer.

4. Ensure the following activity is witnessed:
   a. Remove the tamper-evident seals from three USB ports.

   b. Connect the printer, accessible keypad, and sip-and-puff device to the touchscreen with the USB cables.

   c. Apply tamper-evident seals to the three USB ports so that the seals are connected to the cable and the station.

   d. Record the new seals.

5. Plug in the audio headphones.

9.5   Battery backup

The *Voluntary Voting System Guidelines* require that uninterruptible power supply (UPS) devices be available and able to provide a minimum of two hours of operating time for each voting station component. See the *ClearVote Approved Parts List* for a list of supported UPS devices.

To increase the time available for battery backup of the laser printer, ensure that additional UPS devices are available at the polls. Replace any marginally charged UPS before the start of a voting session.

Note: UPS devices attached to a laser printer must have at least 1000-watt capacity (watts are not the same as VA). Do not assume that a 1500 VA UPS can output 1000 watts to operate a laser printer.

9.6   Starting the ClearAccess station

To start the ClearAccess station:

1. Ensure that the station is plugged in and push the power button.

    • On the Elo E Series touchscreen, the power button is located on the front of the pedestal base behind the screen.

    • On the Elo X Series touchscreen, the power button is located on the frame near the Elo logo.

    • On the EloPOS touchscreen, the power button is located on the back upper right when the touchscreen is in portrait mode and the logo is on the right side on the front of the unit.

    • On the Dell Optiplex, the power button is located at the top of the display on the left when the touchscreen is in portrait mode.

2. After Microsoft Windows starts, press the ESC key or drag up on the touchscreen with your finger to display the Windows Log In screen.

3. On the Windows Log In screen, tap to select one of the following accounts, specify the corresponding password, and tap to complete the Windows login:

   • **ClearAccess**—Use this account to run the ClearAccess program.

     After you log in as the ClearAccess user, the application starts and displays ClearAccess Login screen.

   • **<Windows Administrator>**—Use this account to install and configure Windows on the voting station. The username, such as *CBG*, is defined during Windows installation.

     After you log in as the Windows Administrator, complete any necessary system configuration procedures and log out.

9.7 Logging in to ClearAccess

After you log in to Windows with the Windows ClearAccess user account, ClearAccess displays the login screen.

To log in to ClearAccess:

1. In **Select Role**, choose the desired role from the drop-down list.

   If no election is loaded, select the Administrator role.

   To start a voting session, select the Voter role.

2. In **Enter Code**, enter the code for your role.

3. Tap **OK**.

4. Continue with "Loading an election" below.

5. Continue by reading the remainder of this chapter followed by "Voting preparation" on page 92.

9.8 Loading an election

When an election is loaded, the ClearAccess station's voting location can be set. The ballot styles available to voters using that station are limited to those valid for the location.

To load an election:

1. Export the ADFx from ClearDesign to a clean USB drive.

2. Select a USB port on the ClearAccess station to install the USB drive. Record and remove the tamper-evident seal on the USB port, and insert the drive.

   For the Elo touchscreens, remove the port cover to access the USB ports.

3. Power on the ClearAccess station and log in to Windows as the ClearAccess user.

   The ClearAccess system starts up and displays the login screen.

4. Log in with the Administrator role and code.

   ClearAccess displays the Load Election screen.

5. Tap **Open Election**.

   ClearAccess displays the Elections screen appears with a list of all valid ADFxs on the USB drive.

   ADFxs created in earlier releases of ClearDesign and invalid ADFs containing format issues do not appear in the list. See the *ClearDesign User Guide* for information about migrating older ADFxs to the current version.

6. Tap the election that you want to load.

   ClearAccess displays the Select Vote Center Category screen.

7. Tap the vote center category you want to set.

   The Select Vote Center screen appears.

8. Tap the voting location for the ClearAccess station.

   The Election Preparation screen appears (Figure 9-22).
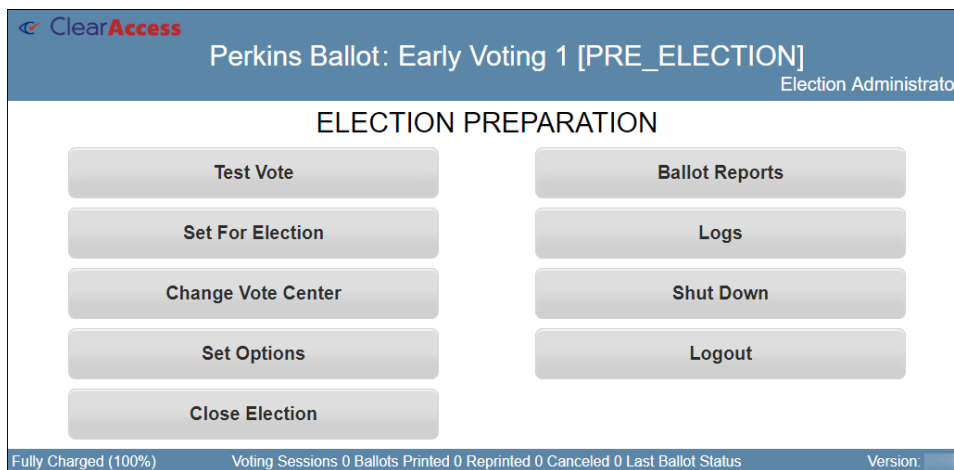
Figure 9-22. Election Preparation screen

9. Remove the USB drive from the ClearAccess port. Replace the port cover, if necessary. Attach and record the new tamper-evident seals.

9.9   Voting session information

The title bar and status bar provide information about the current voting session.

Title bar

The title bar (Figure 9-23) appears at the top of the ClearAccess screen and contains:

- The election title, voting location, and election mode
- The role of the logged-in user

ClearAccess   Sample Election: Precinct 1 [PRE_ELECTION]   Election Administrator
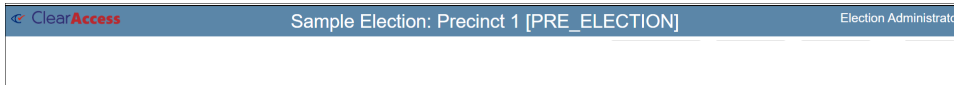
Figure 9-23. Title bar that appears at the top of the ClearAccess screen

Status bar

The status bar (Figure 9-24) appears at the bottom of the ClearAccess screen and contains:

- Barcode scanner indicator (if attached)
- Voting and ballot printing status, including:
  - Voting sessions
  - Ballots printed
  - Ballots reprinted
  - Ballots canceled
  - Last ballot status
- Software version number

Scanner Attached   Voting Sessions 0 Ballots Printed 0 Reprinted 0 Canceled 0 Last Ballot Status Version:
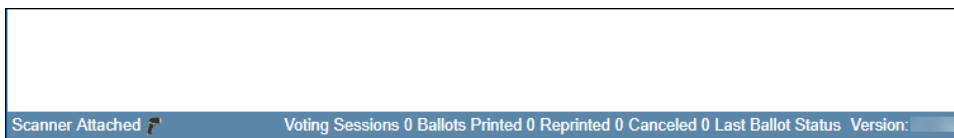
Figure 9-24. Status bar that appears at the bottom of the ClearAccess screen

9.10 Ballot stubs

Your election may have been configured to include stubs on the ballots. A stub is a tear-away perforation that contains information about the ballot (Figure 9-25). The stub can serve as a receipt for voters or as a ballot-tracking or reconciliation mechanism.
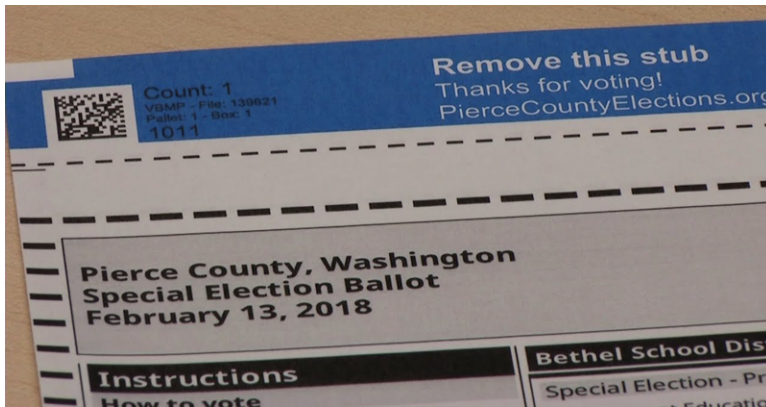
Figure 9-25. Ballot stub

Your ballot designer sets up stubs for an election and determines the content by using ClearDesign. ClearDesign supports up to three stubs per ballot.

Be sure to use the correct length paper stock for your ballot. If your ballot uses stubs, include the perforated stub into your paper size calculation. Printing on the wrong size paper stock can result in unusable ballots.

There is no visual indicator in the ClearAccess system that tells you whether stubs have been enabled for an election. The election administrator role can access the Set Options screen to determine if stub printing is enabled.

Disabling and enabling ballot stub printing

By default, stubs print automatically if they have been configured for an election. If necessary, you can disable stub printing. For example, you might want to do this while testing, or if your ballot stock does not include the perforations needed for stubs.

To turn off stub printing:

1. On the Election Preparation screen, select **Set Options**.

   ClearAccess displays the Set Election Options screen.

2. Deselect the **Print Ballot Stubs** option and tap **OK**.

To turn on stub printing:

1. On the Election Preparation screen, select **Set Options**.

   ClearAccess displays the Set Election Options screen.

2. Select the **Print Ballot Stubs** option and tap **OK**.

When turning stub printing on or off, change the size of the paper stock in the printer accordingly. For example, if you are printing a 17-inch card comprised of a 14-inch ballot with a 3-inch stub and you disable stubs, you must replace the 17-inch stock in the printer with 14-inch stock. It is not necessary to adjust the paper size in the printer's configuration settings. The ClearAccess system determines the correct setting automatically.

9.11   Ballot serial numbers

Your election may include serial numbers on the ballots. Each serial number serves as a unique identifier for an individual ballot. Figure 9-26 shows a ballot containing a serial number.
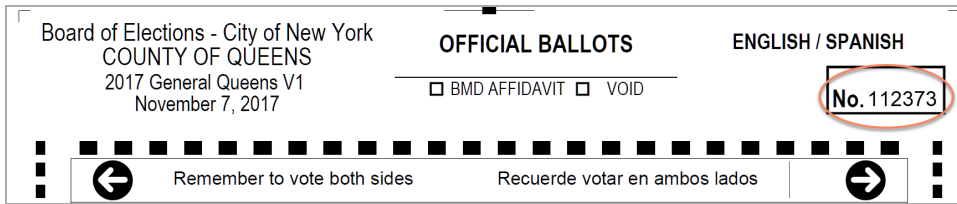
Figure 9-26. Ballot serial number

Election officials use ClearDesign to configure serial numbers and their location on the ballot. The serial number can appear on a stub (if stubs are used on the ballot), in the body of the ballot, or in both places.

By default, the starting serial number is 1. Thereafter, on each printed ballot, the serial number increments by one (such as, 2,3,4,5...). ClearAccess formats serial numbers as whole numbers.

Each ClearAccess station calculates and prints serial numbers independent of others that are deployed for a given election. Therefore, if two ClearAccess stations use identical start numbers, they print the same range of numbers. As a best practice, to ensure a unique set of serial numbers from each ClearAccess station, each station can be configured to use a different starting serial number (for example, 1, 1000, 6000) based on the expected number of ballots it will print.

The serial number resets to the start number when a new election is loaded on the ClearAccess station.

There is no visual indicator in ClearAccess that tells you whether serial numbers have been implemented for an election.

9.11.1 Configuring serial numbers

The ClearAccess system allows you to change the starting serial number for a station. The change takes effect with the next printed ballot. The following circumstances can require you to change the starting serial number:

- Each ClearAccess station is required to print a different range of serial numbers. For example, station A uses a starting number of 1, and station B uses a starting number of 5000.

- You must reprint one or more ballots that printed poorly.

- Test ballots were printed for the election, and you want the first real ballot to begin at the start of the range

When you reset the serial number start value, you can enter any desired number. The *ClearAccess Acceptance Test Checklist* does not validate if the number was used previously. ClearAccess does prevent you from creating a gap in the numbering sequence. Therefore, the number of ballots printed and the serial number on the most recent ballot may not be same.

9.11.2 Viewing serial number values

You can easily view the serial number start value and the serial that will appear on the next printed ballot.

To view the **Serial Number Start Value** and current value:

1. On the Election Preparation screen, select **Set Options**. The Set Election Options screen appears.

    - The **Serial Number Start Value** field shows the number that was configured to appear on the first printed ballot.

    - The **Next Serial Number** field shows the number that will appear on the next printed ballot.

2. Select **Cancel** to close the screen.

9.11.3 Changing the serial number start value

To change the **Serial Number Start Value**:

1. On the Election Preparation screen, select **Set Options**. The Set Election Options screen appears.

2. In the **Serial Number Start Value** field, enter the new value to appear on the next printed ballot.

    - The value can be any whole number, including zero.

    - The ClearAccess system automatically trims leading zeros from the number you enter. For example, 0001 becomes 1.

3. Select the **Reset to Start Value** option. The **Next Serial Number** field changes to match the new start value you entered. This number will appear on the next printed ballot.

4. Tap **OK**.

9.12   Ending a ClearAccess session

Several command buttons enable you to end the current ClearAccess session. The command you choose depends upon your role and what you want to do. See Table 9-1 for a description of each command button.

Table 9-1. Command buttons for ending a ClearAccess session

Command	Use To	Access
Exit	Log out the current user and close ClearAccess. Windows remains running.

Exiting to Windows allows the administrator to log in to the computer as a Windows administrator to perform system functions. | Administrator |
| Log Out | Log out the current user. ClearAccess remains running. | All roles |
| Shut Down | Log out the current user and shut down the ClearAccess station.

At the end of each early voting day, shut down the ClearAccess station, but do *not* close the polls. Close the polls *only* at the end of voting on election day. | All roles |

There is no command button for ending a voting session. Voting sessions end automatically when a voter successfully completes, or cancels, voting. The voting session also times out after a period of inactivity.

9.13   Personal assistive devices

9.13.1 Accessible keypad

The accessible keypad (Figure 9-27) has eight keys that control every possible ClearAccess audio ballot function. The keypad has been designed for ease of use. The keypad is impact-resistant and sealed for cleaning and sanitation.

Clear Ballot provides an optional braille overlay for the keypad. The overly contains braille labels that identify each key for voters who are blind or have low vision.
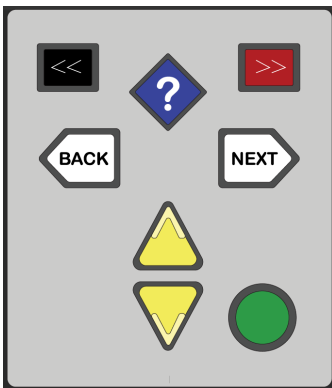
Figure 9-27. Accessible keypad

Table 9-2 lists the commands available on the accessible keypad.

Table 9-2. Accessible keypad commands

Name	Button	Use
Help		Press to display the Help screen.
Enter		Press once to make a choice, such as a candidate selection. Press again to deselect the choice
Next item		Press to move to the next item in a list, such as the next candidate.
Previous item		Press to move to the previous item in a list.
Next screen	NEXT	Press to move to the next screen. Press and hold for more than one second to go to the Review screen. If you are on a write-in screen and press **Next** while the cursor is at the end of the write-in choice, ClearAccess reads the write-in choice out loud. This capability informs voters if they have made a typing mistake before submitting the write-in choice.
Previous screen	BACK	Press to move to the previous screen. Press and hold for more than one second to cancel the voting session.
Settings	>>	Press to display the Settings screen.
Shift	<<	When pressed with another button, Shift controls the audio as follows: - Shift + yellow triangle-up— raises the audio volume - Shift + yellow triangle-down—lowers the audio volume - Shift + white arrow-left—slows the speech rate - Shift+ white arrow-right—speeds the speech rate - Shift + green circle— pauses or resumes the speech - Shift + red rectangle—advances to the next sentence - Shift+ blue diamond—returns to the previous sentence Changes begin with the next spoken sentence.

9.13.2 Sip-and-puff device

The sip-and-puff device allows voters to perform all ClearAccess functions using sip-and-puff activation. The sip-and-puff device provides input using an integrated USB computer interface. It operates at a pressure of approximately 3-inches water column below and above ambient pressure. The device is configurable with DIP switches and allows for flexible positioning of the mouthpiece and headset. Contact Clear Ballot for more information about the appropriate models of sip-and-puff devices to use.

Sip-and-puff functionality

The sip-and-puff device lets voters make choices using a single sip, a single puff, a long sip, a long puff, a double sip, a double puff, a triple sip, and a triple puff.

- The long sip or puff is about half a second long.

- A double sip or puff comprises two single sips or puffs separated by no more than a quarter second.

- Individual sips or puffs in sequence of three must be separated by no more than a quarter second.

Table 9-3 lists sip and puff operations.

Table 9-3. Sip and puff operations

To	Use
Advance the ballot to the next item Move forward through instructions, contest titles, or a list of choices	Single puff
Return the ballot to the previous item Move backward through instructions, contest titles, or a list of choices	Single sip
Select or deselect a choice Select the current item. When the item is selected, the box turns blue. Change the selection, advance to the applicable candidate and perform a long puff. When the item is deselected, the box turns white.	Long puff
Access the menu	Long sip
Move to the next screen	Double puff
Move to the previous screen	Double sip
Display the Settings screen	Triple puff
Display the Help screen	Triple sip

To vote for a candidate not on the ballot, select the write-in option. Additional instructions appear that explain how to complete the write-in vote.

Configuring the sip-and-puff device

Using a paper clip, configure the four DIP switches on the sip-and-puff device as follows:

1. On

2. Off

3. On

4. Off

Setting the fourth DIP switch to Off increases the sip-and-puff sensitivity. This setting is especially important for the optimum performance. For more information, see the user guide for your sip-and-puff device model.

For information about replacing the mouth tube, see "Replacing the sip-and-puff mouth tube" on page 130.

For information about using a voter's personal sip-and-puff device, see "Using a voter's sip-and-puff device" on page 133.

Chapter 10. Pre-election testing

Election officials can test ballots in the ClearAccess accessible voting system. Comprehensive ballot testing should be performed on every ClearAccess station prior to an election.

The process used to test the ballot depends upon the personal assistive device used to vote. For more information, see the following:

- "Voting with the touchscreen" on page 97
- "Voting with the accessible keypad" on page 108
- "Voting with the sip-and-puff device" on page 114
- "Voting with the barcode scanner" on page 121

10.1 Testing criteria

A test model should be built and executed according to the jurisdiction's procedures for each ClearAccess accessible voting station. The test model should cover criteria such as:

- Precinct splits
- Endorsing parties (closed primary only)
- Ballot set (if accessible voting stations are configured with multiple ballot sets)
- Special voting rules
- Personal assistive device inputs
- Touchscreen and audio ballot presentation

Test voting should verify that:

- Vote selection and navigation functions perform as expected.
- Personal assistive devices function correctly.
- Voted printed ballot content is as expected.

10.2 Testing verification

Verify the following items during when testing ClearAccess:

- Do the correct contests appear on the ballot as it being voted?
- Do the contests appear on the ballot in the required order as it being voted?
- Do the correct candidates and responses appear on the ballot in the expected order in the course of voting?
- Are any special voting rules applied in a correct manner?
- Are overvotes, undervotes and blank votes recognized as expected?

- Are ballot returns handled as expected?
- Are the correct partisan contests displayed on primary ballots?
- Is the personal assistive device providing the expected inputs?
- Is ballot navigation occurring as expected?
- Does ballot review present the correct contest and candidate selections?
- Is the touchscreen display functioning as expected?
- Is the audio ballot presented as expected?
- Are audio controls functioning as expected?
- Do the correct contests appear on the printed ballot?
- Do the contests appear on the printed ballot in the required order?
- Do the correct candidates and responses appear on the printed ballot in the expected order?

A testing schedule should be built detailing the criteria applicable to each iteration of ballot testing, the candidate selections made, and the expected outcome.

10.3   Testing process

Before voting, select the ballot you will use. Also determine the presentation and input options you want to use.

1. On the Election Preparation screen, tap **Test Vote**.

   ClearAccess displays the Select Ballot screen.

2. In the Options section of the Select Ballot screen, choose the desired presentation and input options:

   - Select **Sound On** to present an audio ballot.
   - Select **Screen On** to present a visual ballot.
   - For the **Preferred Input Type** options, select one of the following:
     - **Screen**—to make ballot selections using the touchscreen
     - **Keypad**—to make ballot selections using the accessible keypad
     - **Sip & Puff**—to make ballot selections using the sip-and-puff device

3. In the left pane of the Select Ballot screen, select the desired ballot style from the list.

   If necessary, use the **Search** field to locate the desired ballot.

   ClearAccess displays the Ballot Confirmation screen.

4. Review the information on the screen for accuracy and then tap **Vote** to begin voting.

10.4   Changing the vote center

To change the vote center assignment of the ClearAccess station:

1. On the Election Preparation screen, tap **Change Vote Center**.

2. On the Select Vote Center Category screen, select the vote center category.

3. On the Select Vote Center screen, select the new vote center.

   ClearAccess displays the Election Prepartion screen with the new vote center.

10.5   Setting for election

When pre-election testing is complete, set the ClearAccess station to the Election mode so that official voting can begin.

To set the station to the Election mode:

1. When ClearAccess displays the screen shown in Figure 10-1, select the Election Administrator role in **Select Role** field, enter the applicable code in the **Enter Code** field, and tap **OK** .

Figure 10-1. Election Preparation-Please enter the Access Code screen

2. On the Election Preparation screen tap **Set for Election**.

3. Tap **OK** when ClearAccess displays the confirmation message.

4. On the Election Preparation screen tap **Shut Down** to power down the station.

Chapter 11. Voting preparation

This chapter provides some guidelines and procedures to prepare for voting.

11.1 Supplies

Prepare the following voting equipment and supplies for delivery to the polling locations:

- ClearAccess voting station and power cord
- Accessible keypad
- Audio headphones
- Headphone sanitary covers
- (optional) Approved sip-and-puff device
- (optional) Approved barcode scanner
- Extension cord
- Protective power cord matting
- UPS
- Printer and power cord
- Printer USB cable (to connect printer to computer)
- Toner cartridge
- Paper stock
- Tamper-evident seals
- Jurisdictional forms
- Voting screens
- Pens
- Provisional ballot envelope
- Secrecy sleeves

11.2 Preparing the ClearAccess touchscreen for voting

Follow these general guidelines to prepare the touchscreen for voting:

- Position the touchscreen so that voters easily see it.
- Ensure that the touchscreen is within comfortable reach.
- Keep the touchscreen clean throughout voting.

11.2.1 Preparing the ClearAccess equipment for voters who are blind, have low vision, or have hearing loss

Follow these guidelines to prepare the ClearAccess equipment for voters who are blind, have low vision, or have hearing loss:

- Position the ClearAccess station so that it is easily accessible.
- Install the accessible keypad:
  - Ensure that the keypad is available for a voting session.
  - Position the keypad so that it is comfortable to use.
  - Keep the keypad clean.
- Attach the audio headphones to the ClearAccess station:
  - Ensure that the headphones are available for all voting sessions.
  - Keep the headphones clean.
  - Replace the sanitary covers on the headphones after each use.
- Show voters the location of the printer ballot printer and the secrecy sleeves.

11.2.2 Preparing ClearAccess equipment for voters who have difficulty using their hands

Follow these guidelines to prepare ClearAccess equipment for voters who have difficulty using their hands:

- Position the ClearAccess station so that it is easily accessible.
- Ensure that the sip-and-puff device is installed and kept clean.
- Install the disposable mouthpiece on the sip-and-puff device.
- Position the sip-and-puff device on the voter.
- Follow the procedure in this document to set up a voter's sip-and-puff device.
- Keep the sip-and-puff headset and the accessible keypad disentangled.

11.3   Opening the polls

To allow voting to begin, set the ClearAccess station to the Polls Open mode.

When you set the Polls Open mode, the Open Polls report displays automatically. This report contains system, election, voting-location status information, and voted ballot statistics. Verify the contents of this report and confirm that the voted ballot counts are zero.

The appearance of the Voting Log In screen at the end of this procedure ensures that the ClearAccess station is functioning as expected and is ready for voting.

To open the polls:

1. Log in to the ClearAccess station using the poll worker or election administrator role and code.

2. On the Set for Election screen, tap **Open Polls**.

   The Open Polls report appears (Figure 11-1).

Figure 11-1. Open polls report

3. Verify that all applicable status and identification information is correct on the report, and that all ballot counts are zero.

4. Tap **Print** and then **OK** to print the report.

5. Follow your jurisdiction's procedures for handling the report.

   ClearAccess displays the Voting Login screen and the ClearAccess station is ready for voting.

11.4 Voting process

Follow this procedure to vote using the ClearAccess station:

1. Register the voter at the polling location.

2. Log in to the ClearAccess station with the voter role.

   ClearAccess displays the Select Ballot screen.

3. In the Options group box, select the applicable presentation and input options for the voter:

   • Select **Sound On** to play the audio ballot.

   • Select **Screen On** to display the visual ballot.

   • Select the Preferred Input Type: **Screen**, **Keypad**, or **Sip & Puff**.

4. Select the name of the desired ballot from the list on the left of the Select Ballot screen.

   If necessary, use the **Search** field to narrow the list of displayed ballots.

   ClearAccess displays a confirmation message.

5. Review the selections in the confirmation message:

   - If the selections are correct, tap **Vote**.

   - If the selections are incorrect, tap **Back** to return to the Select Ballot screen to make the necessary changes.

6. Allow the voter access to the ClearAccess station and assist the voter as needed.

   The voter selects choices on the ballot, prints it, and is automatically logged out. ClearAccess displays the Login screen.

7. Clean and replace equipment as necessary to prepare for the next voter:

   - Clean the touchscreen and accessible keypad.

   - If the voter used audio headphones, remove the sanitary cover, discard it, and replace it with a new cover.

   - If the voter used the sip-and-puff device, replace the mouthpiece.

11.5 Early voting process

During early voting, the poll worker shuts down the ClearAccess station at the end of each day by logging in with poll worker role and then tapping **Shut Down**.

> **Note**:   Do *not* close the polls during early voting. *Only* close the polls at the end of voting on election day.

11.6 Resuming voting

During early voting, election officials shut down the ClearAccess station at the end of each day *without* closing the polls. Follow the procedure below to resume voting on a subsequent day of early voting.

To resume voting:

1. Log in with the desired user role (poll worker or election administrator) and the applicable code.

   ClearAccess displays the Voting screen.

2. On the Voting screen, tap **Resume Voting**.

ClearAccess displays the Login screen.

3. In **Select Role**, select Voter and enter the voter code in the **Enter Code** field.

Chapter 12. Voting with the touchscreen

This chapter describes how to vote with the touchscreen.

12.1 Selecting a language with the touchscreen

If an election has ballot content in more than one language, the first step in voting is to choose the desired language (Figure 12-1). Tap the button for the desired language to display all contest, candidate, and heading text in that language. If an election is in a single language, no language selection screen appears.

Figure 12-1. Selecting a language with the touchscreen

12.2 Voting instructions for the touchscreen

After selecting the language, ClearAccess displays a screen of voting instructions (Figure 12-2). Tap **Next** to go to the next screen.
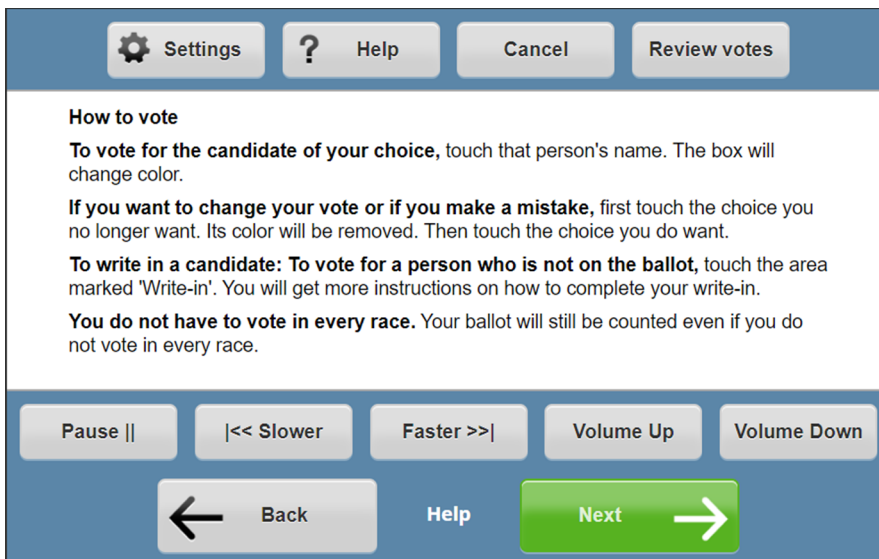
Figure 12-2. Voting instructions for the touchscreen

To display voting instructions at any time, tap the **Help** on the ballot toolbar. Tap **OK** to return to the ballot.

12.3   Ballot header

The next screen displays the ballot header (Figure 12-3). A ballot header can include the election date and the districts applicable to the ballot.
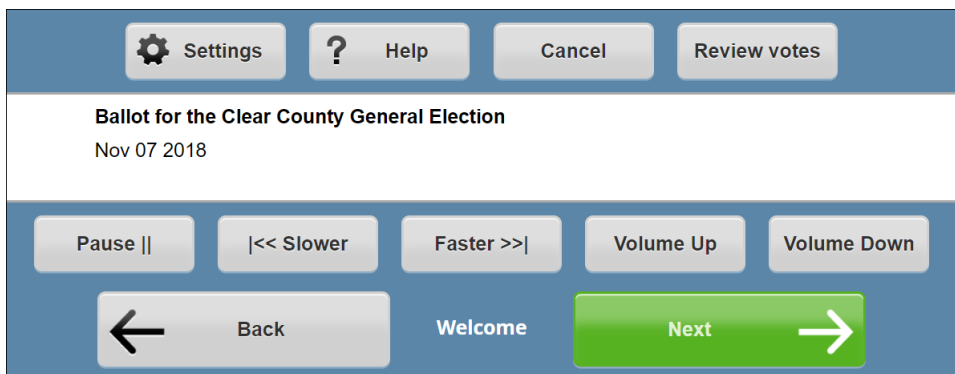
Figure 12-3. Ballot header

If the ballot header does not fit on a single screen, a vertical scroll bar appears on the right. Navigation buttons appearing at the bottom and top and bottom of the ballot header allow the voter to move forward or backward through the header text.

Toolbar

A toolbar appears above the header. The toolbar contains the buttons described in Table 12-1.

Table 12-1. Toolbar

Button	Description
Settings	Controls the visual presentation of the ballot. See "Settings" on page 103.
Help	Enables you to redisplay the voting instructions at any time. See "Voting instructions for the touchscreen" on the previous page.
Cancel	Cancels the current ballot.
Review Votes	Enables you to review the choices that you have made on the ballot. See "Reviewing choices on a ballot" on page 106.

Moving to the next screen

Tap **Next** to advance to the next ballot screen.

12.4   Contests

ClearAccess presents one contest per screen as shown in the example in Figure 12-4.

A contest header appears at the top of the screen. The contest header contains the following:

- The name of the contest
- The allow number of choices
- The text of ballot question

Figure 12-4. Contest screen

If the list of candidates does not fit on a single screen, a vertical scroll bar appears on the right. Navigation buttons at the bottom and top let the voter move forward or backward through the candidate list.

12.5   Selecting choices in a contest

To select a candidate or response choice on a visual ballot, tap the candidate name (Figure 12-5). A check marks then appears next name of the selected choice. The background color of the choice also turns teal (unless your jurisdiction has selected nonstandard color options).

To deselect a choice, tap the choice again. The check mark no longer appears and the background color changes from teal to white.

To select another choice after reaching the maximum number of allowed choices, deselect one of the previous choices and then select the alternate choice.

A choice becomes selected or deselected when a voter taps anywhere in the rectangle containing the choice and then removes a stylus or finger.

Figure 12-5. A candidate selected in a contest

12.6 Ballot navigation

At the bottom of the contest screen, the Back and Next buttons allow a voter to navigate to the previous or following contest on the visual ballot (Figure 12-6). Until the voter selects a candidate or response for the current contest, the Skip button appears in place of the Next button.

Figure 12-6. Back and buttons (outlined in red)

An election can be configured to warn a voter who tries to undervote or blank vote a contest:

- If a voter does not make any choices in a contest and clicks **Next**, ClearAccess presents the warning message for a blank vote.

- If a voter does makes fewer than the allowed number of choices in a contest and clicks **Next**, ClearAccess presents the warning message for an undervote (Figure 12-7).
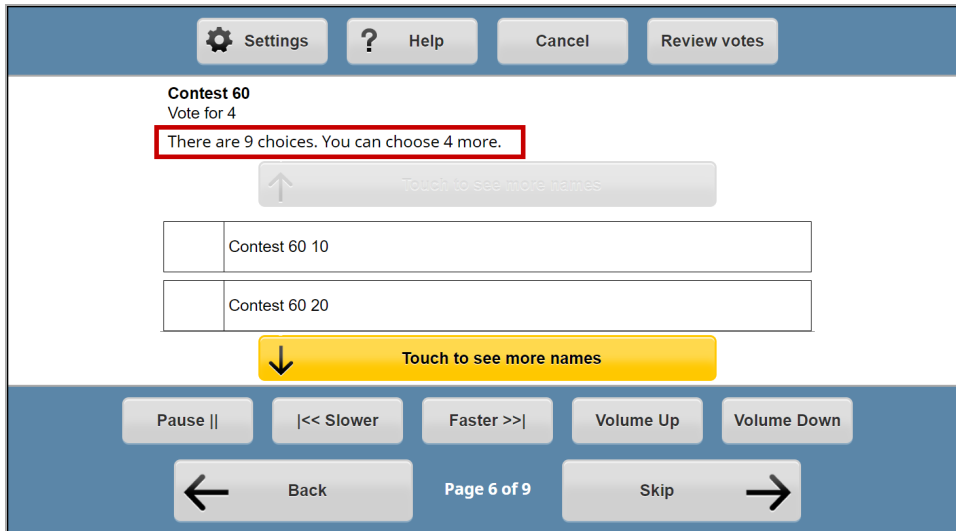
Figure 12-7. Warning for an undervote

To continue to the next contest without selecting any additional candidates or responses, tap **Proceed**. Otherwise, tap **Back** button to return to voting the contest.

12.7 Overvoting

ClearAccess does not allow overvotes.

Suppose that the following conditions are true:

- A voter has selected maximum number of allowed choices in a contest.

- The voter tries to select an additional choice.

In this situation, ClearAccess issues a warning message that guides the voter to correct their vote.

12.8 Write-in votes

To vote for a candidate who is not registered to run in an election, tap a write-in rectangle in the contest. In Figure 12-8, the write-in rectangle is outlined in red.
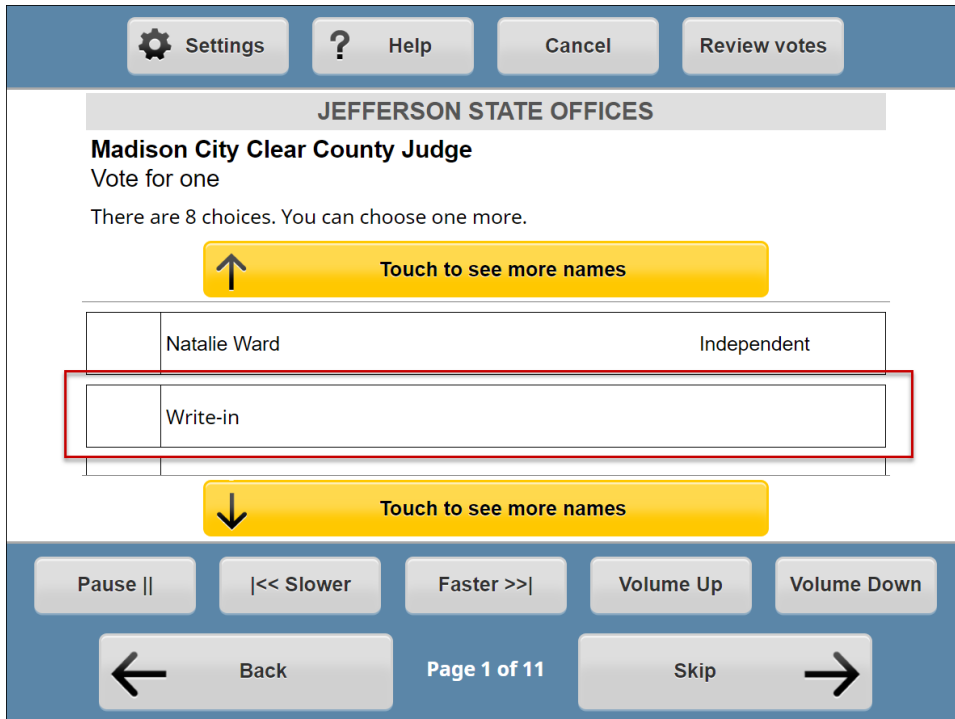
Figure 12-8. Write-in rectangle (outlined in red)

When you tap a write-in rectangle, a screen with a keyboard appears (Figure 12-9). Use the keyboard to enter the candidate name. If the entire keyboard does not fit on the pane provide on the screen, yellow buttons at the top and bottom of the pane enable you move up and down to view the keyboard.

After you type the desired write-in choice, tap **Accept** to save the entry.

Figure 12-9. Keyboard screen for a write-in candidate

12.9   Party preference

In an open primary election, ClearAccess automatically present a Party Preference screen at the start of voting. This screen requires the voter to select a party or the nonpartisan option. The contests endorsed by the selected party are presented on the ballot, in addition to any nonpartisan contests in the election.

If an election is a closed primary, the party is selected by choosing a ballot that is party specific. In a closed primary, the ballot contains only contests endorsed by an individual party plus any nonpartisan contests.

12.10   Canceling a ballot

A voter can cancel a ballot at any time during voting by tapping **Cancel** on the ballot toolbar and selecting **OK** in the confirmation message.

12.11   Settings

The voter can set language, audio, and visual options at any point in the voting process. Use the Settings screen to configure these options. To access this screen, tap **Settings** on the ballot toolbar.

The remainder of this topic explains the available settings.

Language

Select the desired language for the ballot.

The language option does not appear if one language is available.

Zoom

Adjust the magnification of the screen. The following settings available.

- Default
- Small
- Large
- Extra Large

Color

Adjust the screen color and contrast. See Table 12-2.

Table 12-2. Color settings

Setting	Properties
Color	Contest, candidate, and header text appear in a predefined set of colors. Buttons appear with default colors.
Black on White	Black text appears against a white background. Voted candidates and voting options appear in white text against a black background. No color appears otherwise.
White on Black	White text appears against a black background. Voted candidates and voting options appear in black text against a white background. No color appears otherwise.
Yellow on Black	Yellow text appears against a black background. Voted candidates and voting options appear in black text against a yellow background. No color appears otherwise.
Low Contrast	Blank space is darkened to pale gray. Colored space is reduced to a darker gray.

Output

Adjust the visual display of the ballot and screen reader. See Table 12-3.

Table 12-3. Output options

Button	Action
Sound and Screen	Turns on the visual ballot display and the audio screen reader.
Sound Only	Turns off the visual ballot display. When you select Sound Only, the general, audio, and navigation toolbars appear at the top of the screen.
Screen Only	Turns off the audio screen reader.

Sound

Use this option to adjust the audio. See Table 12-4.

Table 12-4. Sound options

Button	Action
Sound On	Plays the audio
Sound Off	Suppresses the audio
Slower	Slows the audio
Faster	Speeds up the audio
Volume Up	Increases the audio volume
Volume Down	Decreases the audio volume

Saving changes and restoring defaults

To save changes and return to the ballot, tap **OK**.

To restore settings to their default values, tap **Reset** and then **OK** to return to the ballot.

12.12 Audio toolbar

The audio toolbar at the bottom of the screen ballot lets a voter control the speed and volume of the audio ballot.
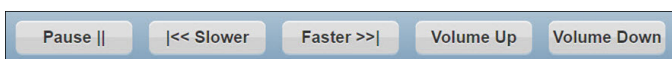
Figure 12-10. Audio toolbar

- **Pause**—Pauses the current audio, changes the button to **Play**

- **Play**—Restarts the audio when it is paused.

- **Slower**—Slows down audio

- **Faster**—Speeds up audio

- **Volume Up**—Increases the audio volume

- **Volume Down**—Decreases audio volume

12.13   Reviewing choices on a ballot

A voter can review a ballot at any time during voting by tapping **Review votes** on the toolbar.

When you tap **Review Votes**, ClearAccess displays the Review Votes screen.

The Review Votes screen reflects the current selection of candidates and responses a voter has made. Contests are presented in the same sequence as on the ballot, although only the voted candidates and responses are listed for each contest. Each contest on the Review Votes screen includes contest summary text, as well the voted candidate and endorsing party, or response. If no selection was made in a contest, text indicates that the contest has not been voted.

The voter can navigate the Review Votes screen using the vertical scroll bar to the right of the contest list. The voter can also tap the navigation buttons at the bottom and top of the Review Votes screen to move forward or backward in the contest list.

The voter can return to a specific contest on the ballot by selecting that contest on the Review Votes screen. Candidate selections can be added or changed on the ballot before returning to the Review Votes screen.

When vote review is complete, the voter taps **Print** to print the ballot so that he or she can deposit it in the ballot receptacle.

12.14   Ballot printing

After reviewing the ballot, the voter must print it so that it can be cast.

The printed ballot contains the same contests as presented to the voter on the ClearAccess station and the candidate and response selections that the voter made. If a jurisdiction is using ballots with multiple languages, the printed ballot will also have multiple languages even though the voter only voted in their chosen language.

To print the ballot:

1.   On the Review Votes screen, tap **Print**.

2. Tap **Print** in the Confirm Printing message.

3. When printing is complete, click **OK** in the Confirm Ballot Printed message.

   ClearAccess displays the Voter Login screen and is ready for the next voter.

12.15   Resolving issues with ballot printing

To resolve issues with ballot printing:

1. The voter taps **Poll Worker** in the Confirm Ballot Printed message to get the attention of the poll worker (Figure 12-11).

   Confirm Ballot Printed

   When your ballot has finished printing 2 pieces of paper press OK.

   If there is a problem please contact a poll worker.
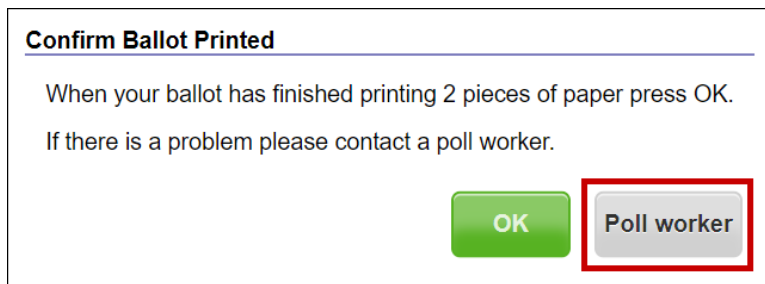
   OK   Poll worker

   Figure 12-11. Confirm Ballot Printed message

2. The poll worker enters the code using the on-screen keyboard that appears and taps **OK**.

3. The poll worker resolves the printing issue.

4. If the printing issue has been resolved, tap **Done** on the Ballot Reprint message, and tap **Yes** in the Confirm Done message.

5. If the printing issue has not been resolved, tap **Reprint** on the Ballot Reprint message.

6. When the ballot has printed successfully, tap **Yes** in the Confirm Done message.

   ClearAccess displays the Voter Login screen and is ready for the next voter.

Chapter 13. Voting with the accessible keypad

13.1   Language selection

The first step in voting is to select the ballot presentation language. If the election is presented in multiple languages, instructions play for selecting the desired language. Use the yellow triangle buttons on the keypad to navigate through the list of languages. When the desired language plays, press the green circle button to select that language.

If the election uses one language, no language selection appears.

13.2   Voting instructions

Listen to the audio of the voting instructions. When the voting instructions have finished playing, press the right white arrow button on the keypad to advance to the ballot header.

The voter can play the voting instructions at any time during voting by pressing the blue diamond-shaped button on the keypad. Listen to the voting instructions, then press the green circle button to return to the audio of the candidate list.

13.3   Ballot header

The voter can play ballot header information, including the date of the election and the districts applicable to the ballot. When the ballot header information has finished playing, press the right white arrow button to advance to the first contest.

13.4   Contests on the ballot

Each contest on the ballot plays with header text, followed by a list of candidates or responses. The header text includes a description of the contest, as well as the number to vote for. The text of a question is contained in the header. Use the yellow triangle down button on the keypad to advance from the contest header to the candidates or responses.

13.5   Contest selection

To select a candidate or response, press the green circle button when the desired selection plays. When a candidate or response has been selected, the selection plays again and confirms it has been voted. To deselect the candidate or response, press the green circle button. The selection plays again, without the confirmation of having been voted.

To select alternate candidates when the number to vote for has been reached, an existing candidate must be deselected before selecting the alternate candidate.

13.6   Ballot navigation

Listen to the audio of the contest header information, then use the lower yellow triangle button to navigate through the candidate list. To go back through the candidate list, use the upper yellow triangle button.

Use the two white arrow buttons located on the center of the keypad to navigate through the ballot screens. Press the right white arrow button to advance to the next screen of the ballot, and the left white arrow button to return to the previous ballot screen.

An election can be configured to return ballots that are either blank-voted or undervoted. Messages then play when a voter attempts to advance to the next contest after making no selection or selecting fewer candidates or responses than the number to vote for.

The following message can be played when a voter attempts to advance from a blank-voted contest:

> "Warning: You have not selected any choices. To return to the contest to make a selection, press Back, otherwise press Proceed to proceed to the next contest without making any selection."

The following message can be played when a voter attempts to advance from an undervoted contest:

> "Warning: You have not made all the choices you are allowed to in this contest. To return to the contest to make a selection, press Back, otherwise press Proceed to proceed to the next contest without making any more selections."

13.7   Overvoting

It is not possible to overvote a contest in the ClearAccess ballot-marking system. No action is taken when a voter attempts to select an additional candidate if the number of candidates to vote for has already been met for a contest.

The following warning message plays when attempting an overvote:

> "You have already selected the maximum number of choices. To choose another name, tap a choice you no longer want. Its color will be removed. Then tap the choice you do want. This helps make sure you only change your vote when you mean to change it."

13.8   Write-in votes

To vote for a candidate who is not registered to run in an election, advance to the write-in position and press the green circle button. After the write-in instructions have played, press the yellow triangle-down key to begin.

Use the yellow triangle-up key to navigate through the letters of the alphabet, beginning with a blank space. When the desired letter plays, press the white right arrow key to select it and continue to the next character position. To go through the alphabet list again, press the yellow triangle-down key to locate the desired letter, then press the white right arrow key to accept the letter and continue to the next position.

When the candidate name is complete, press the green circle button to accept the write-in candidate and return to playing the candidate list.

13.9   Party selection

If the election is an open primary, a party must be selected. Instructions play for selecting the desired party. Use the yellow triangle buttons on the keypad to navigate through the list of parties. When the desired party plays, press the green circle button to select the party.

The party preference contest appears at the beginning of the open primary ballot even if it has not been defined ClearDesign.

13.10   Ballot cancellation

A ballot can be canceled at any time during voting. To cancel the ballot, press the white left arrow button for more than one second, then press the green circle button when the confirmation message plays. When the ballot is canceled, the Voting login screen appears.

13.11   Settings

A voter can press the red rectangle button on the keypad at any point in the voting process to configure ballot settings. The voter uses the Settings feature to define the following:

Language

If the election is presented in multiple voting languages and the desired language has not yet been selected, use the yellow triangle buttons on the keypad to navigate through the list of languages. When the desired language plays, press the green circle button to select it.

If the election is presented in a single language, no language selection is presented to the voter.

Zoom

To display the visual ballot and adjust the magnification settings, use the yellow triangle buttons on the keypad to navigate through the zoom options. When the desired zoom option plays, press the green circle button to select it.

Color

To display the visual ballot and adjust the color and contrast settings, use the yellow triangle buttons on the keypad to navigate through the color options. When the desired option plays, press the green circle button to select it.

Output

To select an alternate visual and audio ballot presentation, use the yellow triangle buttons on the keypad to navigate through the output options. When the desired option plays, press the green circle button to select it.

Sound

To select audio speeds and volume, use the yellow triangle buttons on the keypad to navigate through the sound options. When the desired option plays, press the green circle button to select it.

Saving and Exiting

To save the new options and return to the voting instructions, navigate forward until **OK** plays. Then press the green circle button.

To return to the ballot without making changes, press the white left or right arrow button.

13.12 Audio volume

As the audio plays, the voter can increase the volume to the desired level by pressing the black rectangle button located at the top left of the keypad while repeatedly pressing the yellow triangle-up button. To decrease the volume, press the black rectangle button while repeatedly pressing the yellow triangle-down button until the desired volume is reached.

13.13 Audio speed

The voter can increase the speed of the audio by pressing the black rectangle button located at the top left of the keypad while repeatedly pressing the right white arrow button. To decrease the speed, press the black rectangle button while repeatedly pressing the white left arrow button until the desired speed is reached.

13.14 Pausing and resuming

To pause the audio of the ballot at any point, press the green circle button while pressing the black rectangle button located at the top left of the keypad. To resume playing the audio, press the green circle button again while pressing the black rectangle button.

13.15   Skip to next or previous sentence

A voter can skip to the beginning of the next sentence by pressing the black rectangle button located at the top left of the keypad while pressing the red button at the top right of the keypad. To skip to the beginning of the previous sentence, press the black rectangle button while pressing the blue diamond-shaped button.

This function is available only if an automated text-to-speech (TTS) tool has generated the audio ballot.

13.16   Reviewing votes

The Review Votes feature appears at the end of the ballot and lists all candidate and response selections made by the voter.

Candidate and response selections can be reviewed at any time during voting by pressing the white right arrow button for more than one second. The voter can return to a specific contest on the ballot by pressing the green circle button while the contest header or corresponding candidate audio plays. The voter can change or make additional candidate selections on the ballot before returning to the vote review. When the vote review is complete, the voter can print the ballot.

The vote review reflects the most current selection of candidates and responses the voter has made. Contests are presented in the same sequence as on the ballot, although only the voted candidates and responses are listed for each contest. Each contest in the vote review is presented with contest summary text, as well the voted candidate and endorsing party, or response. If no selection was made in a contest, audio plays, indicating that the contest has not been voted.

The vote review can be navigated using the yellow up and down triangle keys. Repeatedly press the yellow down triangle key to move forward through the contest description and the candidates voted for each contest. To move backward through the vote review, repeatedly press the yellow up triangle key.

13.17   Ballot printing

After the desired candidates and responses have been selected and reviewed, the ballot must be printed.

The printed ballot contains the same contests as presented to the voter on the ClearAccess station and the voter's choices for these contests. If a jurisdiction is using ballots with multiple languages, the printed ballot will also have multiple languages even though the voter only voted in their chosen language.

To print the ballot:

1. When vote review is complete, press the right white arrow button to advance to ballot printing.

2. Press the green circle button as the print confirmation message is played back.

3. After the ballot has been printed, press the right white arrow to confirm the ballot's successful printing. The Voting login screen appears.

13.18   Resolving issues with ballot printing

To resolve a printing issue:

1. If an issue occurs during ballot printing, wait for the ballot printing confirmation message to play.

2. Press the yellow down button until *poll worker* plays, press the green circle button, and then obtain the attention of the poll worker.

3. The poll worker enters the code by using the keyboard on the screen.

4. If the poll worker has resolved the printing problem, press the yellow down button until *Done* plays, and then press the green circle button to continue.

5. Press the green circle button to confirm ending the voting session.

6. To reprint the ballot, press the yellow down button until *Reprint* plays in the confirmation message, and then press the green circle button.

7. When the ballot has successfully printed, press the green circle button to confirm that the ballot has printed.

8. The Voting login screen appears.

Chapter 14. Voting with the sip-and-puff device

This chapter describes how to vote the sip-and-puff device.

14.1 Language selection

If an election has ballot content in more than one language, the first step in voting is to choose the desired language. Make the necessary number of single puffs to advance to the desired language and then make a long puff to select it. If the election is in a single language, no language selection screen appears.

14.2 Voting instructions for the sip-and-puff device

After you select a language, ClearAccess displays a screen of voting instructions. Make a double puff to advance to the next ballot screen.

To display voting instructions at any time, make a long sip. After reviewing the voting instructions, make a long puff to return to the ballot.

14.3 Ballot header

The next screen contains a ballot header. A ballot header can include the election date and the districts applicable to the ballot. Make a double puff to advance to the next ballot screen.

Use single puffs to move forward through a multiscreen header and single sips to move backward through the header screens. On the last header screen, a single puff advances to the first candidate in the contest.

14.4 Contest

ClearAccess presents one contest per screen.

A contest header appears at the top of the screen. The contest header can contain the following:

- The name of the contest
- The allowed number of choices
- The text of a ballot question

Make a single puff to advance from the header text to the first candidate in the list. Make single puffs to advance through the candidate list. Make single sips move backward through the candidates in the list.

If the list of candidates cannot fit on a single screen, make a single puff at the last candidate listed to display the next screen of candidates. If the first candidate on the screen or contest is the first candidate in the contest, make a single sip to display the preceding screen of candidates or header text.

14.5   Selecting a choice in a contest

To select a candidate or response, make a long puff. A check mark then appears next to the selected choice. The background color of the selected choice also turns teal (unless your jurisdiction has selected nonstandard color options).

To deselect a choice, make another long puff. The check mark no longer appears and the background color changes from teal to white.

To select another choice after reaching the maximum number of allowed choices, navigate to one of the previously selected choices, deselect it, and then navigate to and select an alternate choice.

14.6   Ballot navigation

Make a double puff to advance to the next ballot screen. Make a double sip to move to the previous screen.

An election can be configured to warn a voter who tries undervote or blank vote a contest:

- If a voter does not make any choices in a contest and tries to move to the next contest, ClearAccess presents a warning message for a blank vote.

- If a voter makes fewer than the allowed number of choices in a contest and tries to move to the next contest, ClearAccess presents the message for an undervote.

To proceed to the next contest, make a long puff. To return to the contest and continue voting, make either a short sip or puff, and then make a long puff.

14.7   Overvoting

ClearAccess does not allow overvotes.

Suppose that the following conditions are true:

- A voter has selected maximum number of allowed choices in a contest.

- The voter tries to select an additional choice.

In this situation, ClearAccess issues a warning message that guides the voter to correct their vote.

When the warning message for an overvote appears, make a long puff to return to the contest.

14.8   Write-in votes

To vote for a candidate not registered to run in the election, use a series of single puffs to reach the write-in rectangle at the end of the candidate list and then make a long puff to select it.

When you select the write-in rectangle, ClearAccess displays a screen with a keyboard.

Using a series of single puffs, beginning with a space, advance through the letters of the alphabet to reach the desired letter. Use a double puff to select the letter and continue to the next desired character. When the name is complete, use a long puff to submit the name of the write-in candidate.

14.9   Party preference

In an open primary, ClearAccess automatically presents a Party Preference screen at the start of voting. This screen requires the voter to select a party or the nonpartisan option.

Make the necessary number of single puffs to advance to the party of choice and then make a long puff to select the party. ClearAccess presents only the contests endorsed by the selected party and any nonpartisan contests on the ballot.

In a closed primary, a voter selects a party by requesting a party-specific ballot. In a closed primary, A close-primary ballot the contests endorsed by an individual party and any nonpartisan contests.

14.10   Canceling a ballot

A voter can cancel the ballot any time. To cancel the ballot, perform a long sip to access the menu, then a series of single puffs to navigate to the Cancel button. Do a long puff on the Cancel button to display the Cancel Voting message. Then do a double puff to confirm the cancelation.

After you cancel a ballot, ClearAccess redisplays the Voter Login screen.

14.11   Settings

A voter can change the settings at any time.

To change settings:

1. Make a triple puff to open the Settings screen.

2. To navigate on the Settings screen:

    *   Make a single puff to cycle through the list of options.

    *   Make a long puff to select an option.

3. To return all settings to their default values, use a series of single puffs to select the **Reset** button.

4. To save your choices:

   a. Make a series of single puffs to navigate to the **OK** button.

   b. Make a long puff to select **OK** and return to the ballot.

14.11.1 Language

To change the ballot-presentation language, make a series of single puffs until you reach the desired language, followed by a long puff to select it.

14.11.2 Zoom

The Zoom option allows the voter to increase or decrease the size of the visual display. For example, to display the ballot in a large font, make a series of single puffs until you reach the **Large** button, followed by a long puff to select it.

The following settings are available:

- Default
- Small
- Large
- Extra large

14.11.3 Color

Adjust the screen color and contrast. See Table 14-1.

Table 14-1. Color settings

Setting	Properties
Color	Contest, candidate, and header text appear in a predefined set of colors. Buttons appear with default colors.
Black on White	Black text appears against a white background. Voted candidates and voting options appear in white text against a black background. No color appears otherwise.

Table 14-1. Color settings (continued)

Setting	Properties
White on Black	White text appears against a black background.
	Voted candidates and voting options appear in black text against a white background.
	No color appears otherwise.
Yellow on Black	Yellow text appears against a black background.
	Voted candidates and voting options appear in black text against a yellow background.
	No color appears otherwise.
Low Contrast	Blank space is darkened to pale gray.
	Colored space is reduced to a darker gray.

14.11.4 Output

The Output options adjust the visual display of the ballot and the screen reader:

- Select the **Sound and Screen** option to use both options.
- To turn off the audio screen reader, make a series of single puffs to reach the **Screen Only** button and make a long puff.
- To turn off the display of the ballot on the touchscreen, make a series of single puffs to reach the **Sound Only** button and make a long puff.

  When the **Sound Only** option is selected, only the general and navigation toolbars appear at the top of the screen (Figure 14-1).

Figure 14-1. Toolbars when Sound Only is selected

14.11.5 Sound option

The Settings screen contains the audio playback options for sip-and-puff voters:

- To slow down the audio, make a series of single puffs to reach the **Slower** button and then make a long puff.

- To speed up the audio, make a series of single puffs to reach the **Faster** button and then make a long puff.

- To increase the volume, make a series of single puffs to reach the **Volume Up** button and then make a long puff.

- To decrease the volume, make a series of single puffs to reach the **Volume Down** button and then make a long puff.

14.12   Reviewing choices on a ballot

The Review Votes screen appears after the last contest on the ballot. Use a double puff to advance from the last contest to the Review Votes screen.

The Review Votes screen displays the currently selected candidates and responses. Contests appear in the same as on the ballot. Only the selected candidates and responses appear for each contest. Each contest on the Review Votes screen includes contest summary text, the selected candidate and endorsing party, or response. If no selection was made in a contest, text indicates that the contest has not been voted.

Use a series of single puffs to move through the contests and candidates. The first puff moves to the contest heading text. Subsequent single puffs advance through the voted candidates and responses. To move backward through the Review Votes screen, use a series of single sips.

The voter can return to a specific contest on the ballot by selecting that contest on the Review Votes screen. The voter can then change or add choices in selected contest, move through the additional contests, and return to the Review Votes screen.

When the review is complete, perform a double puff to advance to the ballot printing process.

14.13   Ballot printing

After a voter has selected and reviewed the desired choices in an election, the ballot must be printed.

The printed ballot contains the same contests as presented to the voter on the ClearAccess station, and the choices that the voter made. If a jurisdiction is using ballots with multiple languages, the printed ballot will also have multiple languages even though the voter only voted in their chosen language.

To print the ballot:

1. On the last contest on the Review Votes screen, perform a double puff to advance to ballot printing.

2. When ClearAccess displays the Confirm Printing message, make a long puff.

   A print status message appears as the ballot prints.

3. Perform a long puff in the message confirming the ballot has successfully printed.

   ClearAccess redisplays the Voter Login screen and is ready for the next voter.

14.14 Ballot printing unsuccessful

To resolve a printing issue:

1. If an issue occurs during ballot printing, perform the necessary single puffs to advance to the **Poll Worker** button in the ballot print confirmation message, perform a long puff, and then obtain a poll worker.

2. The poll worker enters the code using the on-screen keyboard.

3. When the poll worker has resolved the printing issue, perform the necessary single puffs to reach the **Done** button in the Ballot Reprint message, and then perform a long puff.

4. Perform a long puff in the Confirm Done message.

5. If the printing issue has not been resolved, perform a long puff in the Ballot Reprint message to reprint the ballot.

6. When the ballot has successfully printed, perform a long puff in the Confirm Done message.

   ClearAccess redisplays the Voter Login screen and is ready for the next voter.

Chapter 15. Voting with the barcode scanner

Optionally, a ClearAccess voting station can include a barcode scanner. When a poll worker or poll worker scans a QR code, the ClearAccess station automatically does the following:

- Loads the correct ballot for the voter

- Sets the voter's language and accessible preferences for voting

15.1   Barcode-scanning capabilities

ClearAccess supports the following barcode-scanning capabilities:

- ClearAccess supports only QR codes. ClearAccess does not currently support other types of barcodes.

- ClearAccess can read the following information from a QR code:

○ Election	○ Ballot style
○ Precinct	○ Language
○ Split	○ Preferred Input Type (screen, keypad, sip-and-puff)
○ Party	○ Screen on or off
○ Ballot set	○ Audio on or off

- If only some of the data is present or readable in the QR code, ClearAccess uses the data it can read and then supplies system defaults.

- To select a ballot, the QR code must include at a minimum Precinct and Ballot Style data.

- There are no specific limits on the physical size of the printed QR code. Generally, the larger the size, the farther it must be held from the scanner. Two inches by two inches is an approximate optimum printed size.

- The QR code must have a minimum 0.25-inch white border.

- See the *ClearVote Approved Parts List* for the supported models of barcode scanners.

15.2   Workflow for using a barcode scanner

To use a barcode scanner:

1. During setup of the ClearAccess voting station, the barcode scanner is installed and tested.

   See the *ClearAccess Installation Guide*.

2. During voting, a poll worker obtains the voter's information and prints the QR code for the voter.

3. At the ClearAccess station, the voter (or, if necessary, the poll worker) scans the QR code. The scanner beeps to indicate a successful scan.

4. The ClearAccess station opens the applicable ballot and enables language and accessibility options based on the information in the QR code.

   - If the QR code is not readable, or if the ClearAccess station cannot determine a single ballot style from the QR code data, a message prompts the voter to manually select the precinct.

   - If a particular data point is missing or cannot be read from the QR code (such as, Language), the ClearAccess system uses the default.

5. The voter reviews the screen and confirms that the correct ballot has opened, and then proceeds to vote.

15.3   Installing the barcode scanner

A barcode scanner allows a voter to scan a QR code to automatically load the correct ballot for that voter. See the *ClearVote Approved Parts List* for barcode scanner models supported by ClearAccess.

To install the Elo UM600149 barcode scanner:

1. Remove one of the four plastic coverings on the POS.

   There should be one plastic covering on each side of the POS. After removing the covering, you should see a small port.

2. Insert the Elo barcode scanner into the bottom port, so that the scanner appears at the base of the Elo.

   The machine should beep and the scanner's light should turn on.

The driver for the barcode scanner is installed automatically during ClearAccess installation. No additional software configuration is required to use the barcode scanner.

15.4   Disable EloPOS unused peripheral USB ports

For security reasons, it is highly recommended to turn off or disable all unused peripheral USB ports located on each side of the Elo touchscreen.

1. Power off EloPOS

2. Plug in a keyboard to any USB-A port

3. Power on the EloPOS by pressing the power button located on the back right of the touchscreen

4. While its booting up, repeatedly press delete until it boots into its BIOS menu

5. Use right arrow to go into 'Advanced' tab

6. Scroll down and select 'USB Configurations'.

7. Disable all unused USB peripherals (Top, Bottom and Right).

8. Save and Exit the BIOS.

9. Power off and then power on the EloPOS so the changes take effect.

15.5   Voting using a barcode scanner

To vote using a barcode scanner:

1. The ClearAccess system automatically displays barcode scanning instructions when a barcode scanner is attached.
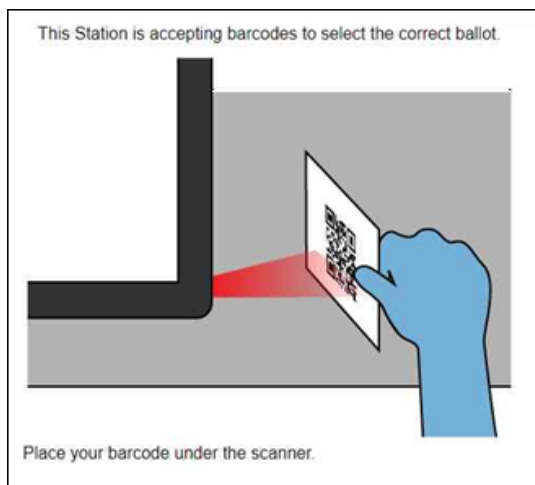

Figure 15-1. Barcode scanner

The status bar also indicates that a scanner is connected.
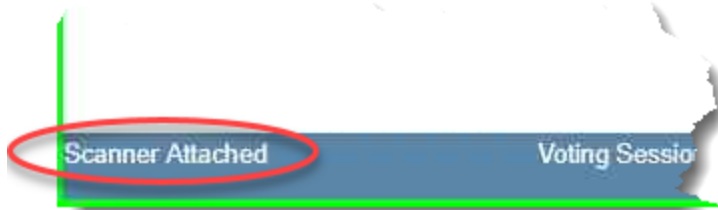
Figure 15-2. Scanner attached message

2. Hold the QR code 5 to 10 inches away from the barcode scanner so that the barcode scanner's red target light centers on the code
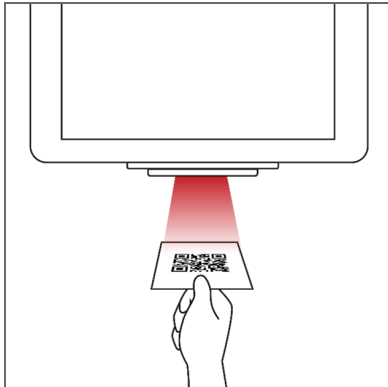

Figure 15-3. Barcode scanner light

3. If the code scans successfully, the scanner beeps and the Ballot Confirmation screen appears. Review the selected options to ensure they are correct, and then proceed with voting.
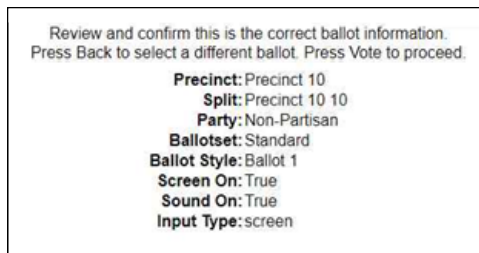

Figure 15-4. Ballot Confirmation screen

If a beep does not sound and the screen does not change, the code did not scan. Try changing the code's position. If the paper is curled or rumpled, flatten it as much as possible. If it still does not scan, the QR code may be unreadable. Tap **Select Lookup** to select a ballot manually and proceed with voting.

4. If the code scans, but there is insufficient data to select a ballot, the ClearAccess system displays an error message. Select a ballot manually and proceed with voting.

Chapter 16. Ending an election

This chapter describes the procedures for ending an election.

16.1 Closing the polls

At the end of voting on election day, you need to close the polls on the ClearAccess station. Only poll workers and election administrators can close the polls.

When the polls are closed:

- The election enters the Postelection mode.

- The Close Polls report displays automatically. The report provides voted ballots statistics, as well as system, election, and voting location data.

> **Note**: *Close the polls only at the end of Election Day*. At the end of early voting days, shut down the ClearAccess station, but do *not* close the polls.

To close the polls:

1. Log in with the Poll Worker or Election Administrator role.

2. Tap **Close Polls** on the Voting screen.

   ClearAccess displays the Close Polls report (Figure 16-1).

Figure 16-1. Close Polls Report

3. Check that all applicable status and identification information is correct on the report.

4. Tap **Print** to print the report.

5. Tap **OK** to complete closing the polls.

6. Follow your jurisdiction's procedures for handling the report.

7. If you are logged in with the election administrator role, ClearAccess displays the Post Election screen (Figure 16-2).
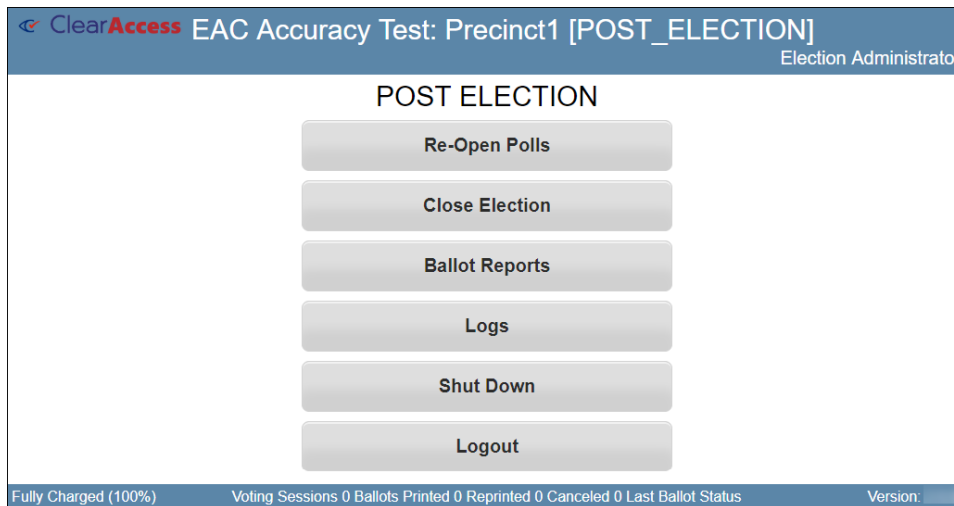

Figure 16-2. Post Election screen

16.2 Reopening the polls

If necessary, the election administrator can reopen the polls to allow voting to continue. To do this, the election must still be in the Postelection mode; it cannot have been closed.

To reopen the polls:

1. Log in with the Election Administrator role.

   ClearAccess displays the Post Election screen (Figure 16-2).

2. Tap **Re-Open Polls**.

   A message asks you to confirm reopening the polls.

3. Tap **OK**.

   The polls are reopened and voting can continue.

16.3   Exporting the election log

Both the system log and the election log can be exported in CSV format to a USB drive.

To export the election log :

1. Tap the **Logs** then tap **Election Log**.

2. Insert a clean USB drive into one of the available USB ports on the ClearAccess station.

3. When ClearAccess displays the Election Log, tap **Export**.

4. Tap **OK** when ClearAccess displays the confirmation message.
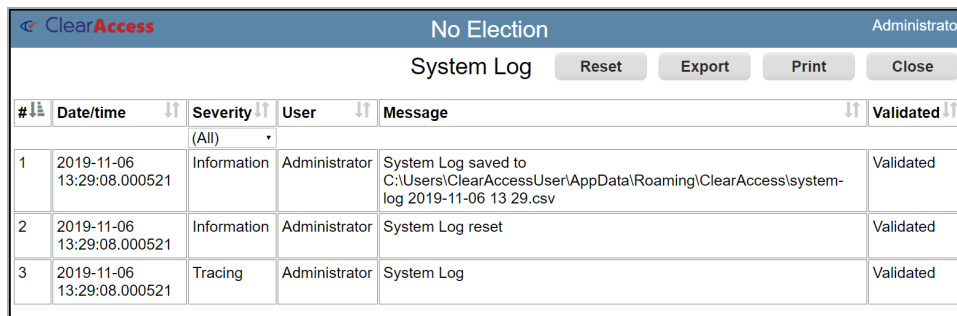
5. Remove the USB drive.

16.4   Resetting the system log

Administrators can reset the system log. When this is done, the log's existing data is purged and archived to a CSV file. The path to the archive appears in the new log.

To reset the system log:

1. Log in as the administrator and then tap **Logs**.

2. When ClearAccess displays the System Log, tap **Reset**.

3. Tap **OK** on the confirmation message.

4. ClearAccess displays the new system log (Figure 16-3).

    Item 1 in the new log indicates that the log has been reset and the Message column lists the path to the archived system log.

Figure 16-3. New System Log

16.5   Closing the election

At the end of voting (pre-election testing or official voting), the election must be closed. Only the administrator and the election administrator can close an election.

To close an election:

1. On the Post Election screen, tap **Close Election**.

2. Tap **OK** in the confirmation message.

16.6   Archiving election materials

Ensure that all applicable paper and electronic records are archived at the end of the election, including:

- Voted ballots

- Voting station election results reports

- Voting station zero Totals reports

- Voting station election log

- Voting station system log

- Test election results reports and zero Totals reports

- Ballot test decks

- Voting equipment inventory records

- Voting equipment service records

- Ballot reports

- Public L&A test materials (ballots, reports)

- Encrypted accessible definition file (ADFx)

16.7   Breaking down the ClearAccess station

Following an election, disassemble and pack each ClearAccess voting station as follows:

Touchscreen computer

1. Power off the touchscreen computer and the printer.

2. Verify all tamper-evident seals.

3. Detach all seals necessary to access and remove the peripheral device connections:

   - Accessible keypad

   - Audio headphones

   - Sip-and-puff device

   - Barcode scanner (if used)

   - Printer cable

4. Disconnect all peripherals from the ClearAccess station.

5. Unplug and remove the touchscreen power cord.

6. (On the Elo touchscreens only) replace the port plate cover.

7. Apply tamper-evident seals.

8. Record all newly applied seals.

9. Pack the ClearAccess station and peripherals into the carrying case.

Printer

1. Unplug the printer power cord and disconnect it and the USB cable.

2. Remove the paper from the printer.

3. Collapse the printer input and output trays.

4. Remove the image drum from the printer with the toner cartridge locked inside and place it in the designated plastic bag.

5. Pack the printer, printer parts, and cables into the printer transport case.

Other equipment and supplies

1. Unplug the UPS.

2. Remove any power cord matting.

3. Unplug and spool and extension cords.

4. Pack the remaining supplies into the designated container.

Appendix A. Replacing the sip-and-puff mouth tube

The sip-and-puff mouth tube is a clear plastic tube shaped by an internal wire. The tube and wire can be bent and cut to meet individual needs. The mouth tube connects to a metal tube, which in turn connects to further plastic tubing and the sip-and-puff control box.

Replacing the mouth tube involves removing the existing plastic tube and wire and installing new ones.

To remove the existing plastic tube and wire:

1. Detach the sip-and-puff device from the ClearAccess station.

2. Using a Allen screwdriver, unscrew and remove the cover of the bracket that connects the headpiece to the mouth tube (Figure A-1).
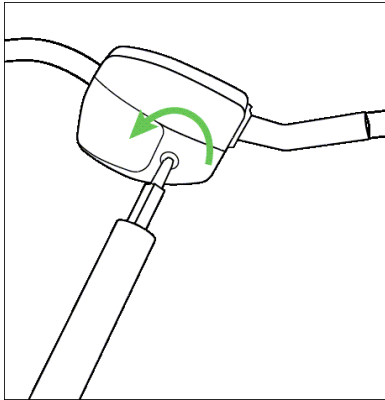

Figure A-1. Removing the cover of the bracket that connects the headpiece to the mouth tube

3. Note the position of the tubing inside the bracket. Then remove the mouth tube from the bracket (Figure A-2).
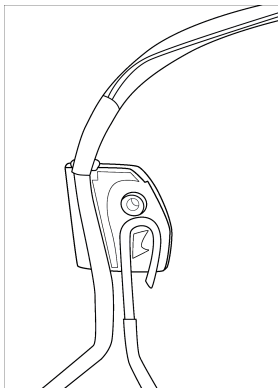

Figure A-2. Removing the mouth tube from the bracket

4. Note the way the plastic mouth tube is attached to the curved metal tube (Figure A-3).
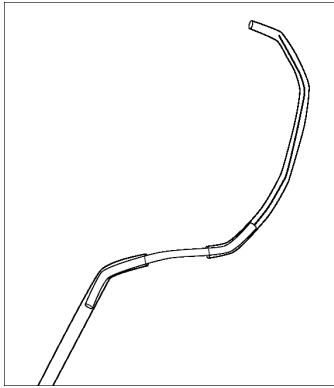
Figure A-3. Plastic mouth tube attached to the curved metal tube

5. Detach the mouth tube by working its lower end gently back and forth until it slips off the metal tube.

6. Ease the wire out of the metal tube.

7. Discard the old wire and mouth tube.

To install the new plastic tube and wire:

1. Remove the new mouth tube and wire from its packaging (Figure A-4).

Figure A-4. Removing the new mouth tube and wire from its packaging

2. Detach the wire from the new mouth tube.

3. Insert the wire into the open end of the metal tube. Slide it in carefully until it clears the bend in the metal tube (Figure A-5).
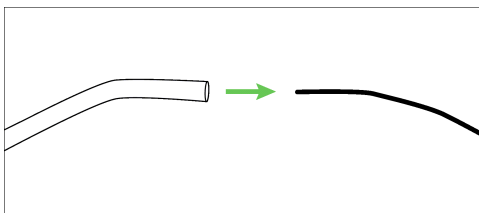
Figure A-5. Inserting the wire into the open end of the metal tube

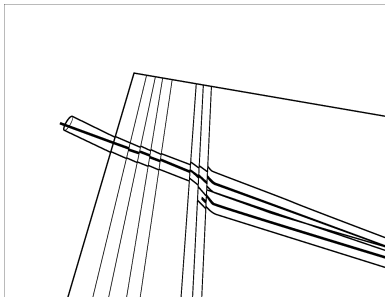4. Slide the new mouth tube over the wire and ease it over the metal tube. Work it gently back and forth until it reaches the bend in the metal tube (Figure A-6).

Figure A-6. Sliding the new mouth tube over the wire

5. Place the mouth tube back in its original position inside the bracket.

6. Return the bracket cover and screw it shut (Figure A-7).

Figure A-7. Returning the bracket cover

7. Reinstall the sip-and-puff USB connector into the designated port of the ClearAccess station.

Appendix B. Using a voter's sip-and-puff device

This topic describes how to install a voter's sip-and-puff device.

B.1   Installing a voter's sip-and-puff device on the ClearAccess station

To install a voter's sip-and-puff device:

1. Remove the tamper-evident seal from the accessible keypad USB connector.

2. Record the seal removal.

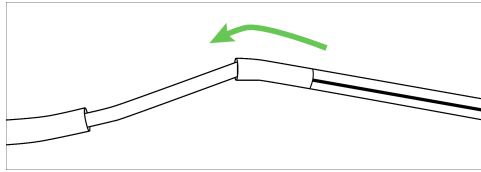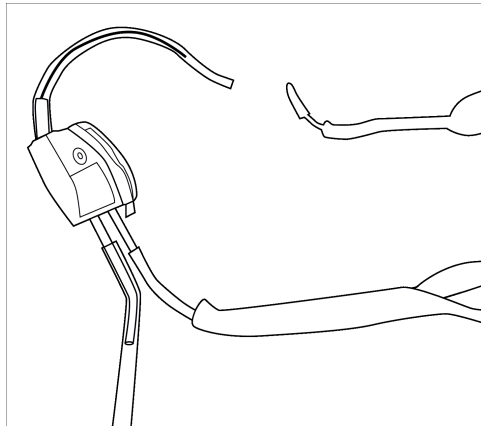3. Disconnect the accessible keypad USB connector from the ClearAccess station.

4. Insert the voter's sip-and-puff USB connector into the ClearAccess port previously used by the keypad.

5. Apply a tamper-evident seal to the voter's sip-and-puff USB connector so that it adheres to both the connector and the ClearAccess station base.

6. Record the newly applied seal.

B.2   Detaching a voter's sip-and-puff device from the ClearAccess station

When the voter is finished voting, detach the voter's sip-and-puff device as follows:

1. Remove the tamper-evident seal from the voter's sip-and-puff USB connector.

2. Record the seal removal.

3. Disconnect the voter's sip-and-puff USB connector from the ClearAccess station.

4. Insert the accessible keypad USB connector into the ClearAccess port where the voter's sip-and-puff device was connected.

5. Apply a tamper-evident seal to the accessible keypad USB connector so that it adheres to both the connector and the ClearAccess station.

6. Record the newly applied seal.

Appendix C. Troubleshooting

C.1   Loss of power

If the ClearAccess station or printer is not receiving AC power, perform the following steps in sequence until the problem is resolved.

1. If there is a power outage, use a UPS an uninterruptible power supply (UPS) to provide power. Use only the UPS models listed in the *ClearVote Approved Parts List*.

2. Ensure that power cords are plugged into the ClearAccess station, the printer, and the power outlet properly.

3. Use a charging device, such as a mobile phone charger, to test the power outlet. If the charger receives power, but the ClearAccess station or printer does not, the ClearAccess station must be replaced. Configure the new station according to the instructions provided in the *ClearAccess Installation Guide*.

4. If the power outlet is not functioning, try plugging the station or printer into an alternate power source.

5. If none of the power outlets at the polling location are functional, use a UPS to provide power.

Supplies

- Power cord
- Mobile phone charger
- UPS

C.2   Troubleshooting the touchscreen

If the touchscreen is not functioning as expected, perform the following steps in sequence until the problem is resolved.

1. Cancel the ballot. Then open the same ballot, ensuring that the Preferred Input Type option is set to **Screen**.

2. Cancel the ballot, end voting, and shut down the ClearAccess station *without* closing the polls. Detach and reattach the power cord to power on the ClearAccess station. Re-enter voting mode, ensuring that the Preferred Input Type option is set to **Screen**.

C.3   Troubleshooting the keypad

If the keypad is not functioning as expected, perform the following steps in sequence until the problem is resolved.

1. Disconnect the keypad from the ClearAccess station and reinsert it into the USB port.

2. Cancel and relaunch the ballot. Ensure that the Preferred Input Type option is set to **Keypad**.

3. Cancel the ballot, end voting, and shut down the ClearAccess station without closing the polls. Detach and reattach the power cord to power on the ClearAccess station. Re-enter voting mode, ensuring that the Preferred Input Type option is set to **Keypad**.

4. If the keypad continues to malfunction, replace the keypad.

Supplies

One accessible keypad

C.4   Troubleshooting the sip-and-puff device

If the sip-and-puff device is not functioning as expected, perform the following steps in sequence until the problem is resolved.

1. If a voter's personal sip-and-puff device is not registering inputs in the ClearAccess voting system, ensure that "Installing a voter's sip-and-puff device on the ClearAccess station" on page 133 was followed correctly.

2. Disconnect the sip-and-puff device from the ClearAccess station and then reconnect it.

3. Cancel and open the same ballot, ensuring that the Preferred Input Type is set to **Sip-and-Puff**.

4. Cancel the ballot, end voting, and shut down the ClearAccess station without closing the polls. Detach and reattach the power cord to power on the ClearAccess station. Re-enter voting mode, ensuring that the Preferred Input Type is set to **Sip-and-Puff**.

5. Ensure that the sip-and-puff DIP switches are configured properly. See "Increasing sip-and-puff sensitivity" on the next page.

6. If the sip-and-puff device continues to malfunction, replace it with a new sip-and-puff device.

7. If the sip-and-puff device continues to malfunction, replace the ClearAccess station with a new one that has been configured according to the instructions in the *ClearAccess Installation Guide*.

Supplies

- One spare mouth tube (if the mouth tube is being changed)
- One sip-and-puff device (if the device is being replaced)
- One paper clip (if DIP switch settings must be changed)

C.5   Increasing sip-and-puff sensitivity

If a voter indicates that the sip-and-puff device is not responsive enough:

1. Check to see if the fourth DIP switch is in the Off position.

2. If it is not, use a paper clip to set the switch to Off.

3. Confirm with the voter whether sip-and-puff performance improves.

4. If performance does not improve, disconnect the sip-and-puff device from the ClearAccess station, and then reconnect it. Removing the sip-and-puff device from the ClearAccess station does not affect the voting session other than increasing the sip-and-puff sensitivity.

Supplies

One paper clip

C.6   Troubleshooting the audio

If the audio is not functioning as expected, perform the following steps in sequence until the problem is resolved.

1. If a voter reports a problem with the volume control, assist him or her in operating the controls.

   If a ballot is displayed on the touchscreen, navigate to a screen with no vote selections before adjusting the volume.

2. Cancel the ballot. Then open the same ballot again, ensuring that the Sound On option is selected.

3. Cancel the ballot, end voting, and shut down the ClearAccess station *without* closing the polls. Detach and reattach the power cord to power on the ClearAccess station. Re-enter voting mode, ensuring that the Sound On option is selected.

4. Disconnect the headphones from the ClearAccess station, and then reconnect them.

5. If the headphones continue to malfunction, replace the headphones.

Supplies

One pair of audio headphones

C.7   Troubleshooting the printer

The following table lists potential printer issues and possible solutions.

Table C-1. Printer troubleshooting

Symptom	Condition	Resolution
Ballot prints with headers and footers	Occurs when printing a ballot from ClearAccess	1. Log in to the ClearAccess station with the administrative role. 2. Tap **Setup**. 3. Select a different (any) printer. 4. Tap **Save**. 5. Tap **Setup** again. 6. Reselect the original printer. 7. Tap **Save**.

Table C-1. Printer troubleshooting (continued)

Symptom	Condition	Resolution
Unable to cancel a print job	ClearAccess does not allow access to the Windows Print Queue if it's necessary to cancel a print job.	Cancel the current print job using the control panel on the printer, as follows: Okidata: Tap the inverted triangle button once. Lexmark MS521dn: 1. Press the red **X** button. The Cancel a job menu appears on the LCD screen. 2. Use the UP and DOWN arrows to select *Print Jobs* and press **OK**. The Select to cancel menu appears. 3. Use the UP and DOWN arrows to select the desired print job and press **OK**. The desired print job is canceled.
Smudging on ballots	Smudges appear on printed ballots.	1. Ensure the printer's MediaWeight option is correctly set. See the printer configuration information in the *ClearAccess Installation Guide*. 2. Clean the printer as described in the *ClearAccess Maintenance Guide*.

Table C-1. Printer troubleshooting (continued)

Symptom	Condition	Resolution
Paper size mismatch	Printer displays an error such as: "Load letter/plain and press ON LINE switch 460:MP Tray size mismatch."	Using the printer's control panel for the desired tray: 1. Change the paper size setting to a different value, such as from Letter to Custom. 2. Return to the Main menu. 3. Return to the Paper Size setting for that tray and restore the setting to the desired size.
Longer ballots get stuck exiting the printer	Longer ballots exiting the Okidata B432dn printer may occasionally get stuck in the seam between the printer lid and chassis. This occurs most often with 17-inch ballots.	Raise the paper stop on the printer lid.
One side of printed paper prints out black	Printer prints with one side of the printed media black when using paper that is too thin.	Use paper with dimensions as described in the *ClearVote Ballot Stock and Printing Specification*.

Appendix D. Error messages

The following error messages may appear while using the ClearAccess system. Recommended resolution procedures are included.

> **Note**: When you troubleshoot voting issues, make sure that you maintain the privacy of voters.

The error messages are documented as they appear when using the touchscreen input and display. Similar messages are presented when using the accessible keypad, the sip-and-puff device, or audio.

D.1 Incorrect login code (password)

The following message appears if the login code is incorrect: Invalid code.

Resolution: Ensure that the desired role is selected from the **Select Role** list and use the on-screen keyboard to enter the corresponding code in the Enter Code field.

D.2 Invalid election code

The following message appears if the code is incorrect when loading the election: Invalid code.

Resolution: Use the on-screen keyboard to enter the correct election code in the ADF Code field.

D.3 Incorrect poll worker code

The following message appears if a poll worker enters and incorrect code when resolving a ballot-printing issue: Invalid code.

Resolution: Use the on-screen keyboard to enter the correct poll worker code.

D.4 No audio or screen selection

An error message appears if you do not select the **Sound On** or **Screen On** options on the Select Ballot screen.

Resolution: Select **Sound On** or **Screen On** to begin voting.

D.5 Print error

An error message appears if a ballot printing error occurs.

Print Error

There appears to be a problem printing your ballot

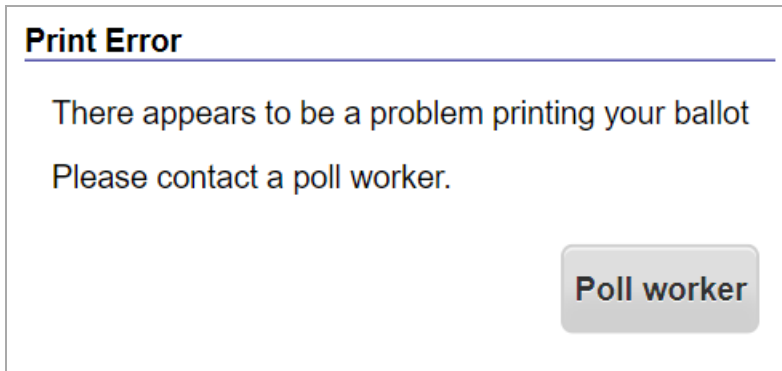Please contact a poll worker.

Poll worker

Figure D-1. Ballot printing error

Resolution: Ensure that:

- The printer has the required ballot stock.

- The ink cartridge contains toner.

- Ballots do not jam during printing.

- You clear a paper jam before trying to reprint the ballot.

After you resolve the printing issue, tap the **Poll worker** button to continue.