

# DS200 Precinct Ballot Scanner Pre-Election Day Training Manual Version Number 1.6.x

Election Systems and Software, Inc. 11208 John Galt Blvd. Omaha, Nebraska 68137 United States of America Phone (402) 593-0101 Toll Free (877) 377-8683 Fax (402) 593-8107 http://www.essvote.com © 2008 by Election Systems & Software, 11208 John Galt Blvd., Omaha, NE 68137-2364.

All rights reserved. Printed in the USA

Security Recommendations, ES&S, Omaha, NE

This document, as well as the product described in it, is furnished under license and may be used or copied only in accordance with the terms of such license. The content of this document is furnished for informational use only, is subject to change without notice, and should not be construed as a commitment by Election Systems & Software, Inc. Election Systems & Software, Inc., assumes no responsibility or liability for any errors or inaccuracies that may appear in this document. Except as permitted by such license, no part of this publication may be reproduced, stored in a retrieval system, or transmitted, in any form or by any means, electronic, mechanical, recording, or otherwise, without the prior written permission of Election Systems & Software, Inc.

#### Disclaimer

Election Systems & Software does not extend any warranties by this document. All product information and material disclosure contained in this document is furnished subject to the terms and conditions of a purchase or lease agreement. The only warranties made by Election Systems & Software are contained in such agreements. Users should ensure that the use of this equipment complies with all legal or other obligations of their governmental jurisdictions.

All products described in this document are registered trademarks of Election Systems & Software Inc. All other products mentioned are the sole property of their respective manufacturers.

#### **Proprietary Information**

ES&S has identified and appropriately marked relevant portions of this document, which it considers confidential and proprietary. This version of the document has not been certified by the EAC. The document sections referenced below contain Election Systems and Software, Inc. (ES&S) confidential information, which is provided for the sole purpose of permitting the recipient, to evaluate the ES&S Voting System submitted herewith. The following sections are designated as "Proprietary and Confidential" by Election Systems & Software.

Proprietary Document Section	Description
All	

## Checking Supplies and the Equipment

- **1**. 1 spool 3" thermal paper per scanner per election
- **2**. USB flash drive (Each machine provided with a 4GB flash drive)
- **3**. Ballot marking devices (pens) (1 pen per voting booth)
- **4**. 1 pressurized can of air
- **5**. 1 clean lint-free cloth
- **6**. 1 bottle of Isopropyl rubbing alcohol (cleaning solution)
- $\square$  7. 1 DS200 scanner with keys
- $\square$  8. DS200 power cord
- **9**. 1 ballot box per scanner with keys
- **1**0. Extension cord if required

#### <u>Cleaning the Scanner</u>

- **1**. Remove the scanner and power cord from the carrying case.
- Clean the ballot entrance and exit slots with a can of pressurized, clean, dry air. Aim the air spray tube into the ballot entrance and exit slots and blow out all the debris.
- Use the lint-free cloth and cleaning solution to clean the outer casing of the scanner.
- 4. Use a lint-free cloth and cleaning solution to clean the LCD touch screen.
- **5**. Wipe all traces of the cleaning solution after cleaning.
- $\Box$  6. Unlock the rear access door on the back cover of the DS200.
- 7. Once this door is unlocked and the back cover of the DS200 is raised, the ballot transport mechanism can be opened.



State of Maine Update July, 2013

- 8. Lift up the latches on the left and right side of the ballot transport and lift the top cover to access the ballot transport area.
- 9. Use a lint-free cloth and cleaning solution to clean the glass surface of the contact image sensors.
- 10. Wipe the rubber rollers on the bottom surface of the ballot transport.
  - 11. Close and lock the rear access door.

#### **Cleaning the Ballot Box**

- 1. Wipe dust and debris out of both of the ballot box's bins.
- **2**. Clean the outside of the ballot box with a soft cloth.

#### Attaching the DS200 to the Ballot Box

- □ 1. Unlock and open the ballot access flap (aka "barn door") on the back of the ballot box. Position this flap in the up position so ballots can pass into the ballot box.
- 2. Unlock and open the Counter Access Panel on the front of the ballot box (top). Place the scanner about 1/4 of the way into the recessed area and slide it on the mounting rails until it is four to five inches from the back of the recessed area.
- □ 3. Plug the diverter cable (attached to the ballot box) into the **diverter port** on the back of the scanner.
- □ 4. Inspect the power cord for damage. If the cord is damaged, contact the Elections Division or ES&S for a new cord. Thread the cord through the opening on the side of the ballot box until it appears inside the opening behind the scanner.



#### Confidential and Proprietary to ES&S

□ 5. Plug the power cord into the **power port** (flat side of the plug facing up) and then plug the AC power cord from the external power supply into a 120-volt wall outlet.

**WARNING:** Only plug the scanner into a grounded, three-pronged electrical outlet. Plug only one scanner into an outlet. ES&S recommends that you do not use an extension cord.



- □ 6. Slide the scanner until it is against the back of the ballot box making sure that both cables do not block the ballot feed slot just above the cord area. Open the Auxiliary bin door and pull down and twist the plunger pin, so the plunger pin pops up to hold the scanner in place. Close and lock the Auxiliary bin door.
- **7**. Close and lock the Counter Access Panel in the UP position.

# Changing the Paper in the Scanner's Internal Printer

**NOTE:** ES&S recommends that you begin each election with a new, full roll of paper on every scanner.

- $\Box$  1. Unlock and open the DS200 screen.
- 2. Unlock the access door, located above the printer. This will allow you to access the printer release lever.
- □ 3. Press the lever to unlock and open the printer door.



4. Drop the paper into the printer paper compartment.

**IMPORTANT:** Make sure the glossy side of the thermal paper is facing the thermal printer.

- □ 5. Pull the end of the paper roll out toward the ballot input tray of the DS2000 (to the right of the paper compartment).
- □ 6. Close the printer door by pressing firmly to assure it locks into place.

#### Loading the Election Definition and Ballot Image Flash Drives

A USB flash drive stores the scanner's election definition and ballot count.

□ 1. Lift the access door on the front left of the scanner to access the USB flash drive areas A, B and C.

□ 2. Remove the protective plastic cap of the USB flash drive containing the election definition.

□ 3. Insert the flash drive into slot B. Do <u>not</u> use slots A or C. Do not force the flash drive into the slot – the label with the date and title of the election should be facing to the right.



**NOTE:** The flash drive has a slot on top for a wire seal; however, the State of Maine does not require a wire seal as this compartment is already locked.

#### Initial State Report

Once the Election Definition is loaded and recognized by the scanner, the Initial State Report will print.

The Initial State report is automatically generated when the DS200 is turned on and an election definition flash drive is accessible. Assure this information is correct:

- Current Date and Time
- Election Name specific to election
- Election Date *specific to election*
- Polling Place Information specific to municipality
- Number of Precincts *specific to municipality*
- Diverter Installed
- Report Type
- Ability to Reopen Polls
- Configuration for:
  - Over voted Ballots
  - Blank Ballots
  - Cross-over Ballots (*N/A in Maine*)
- Ballot Information *specific to election*
- Modem Information (*N/A in Maine*)

**NOTE:** If any of the information is incorrect, contact the Division of Elections or ES&S for assistance and/or instructions.

\*\*\* Initial State Report \*\*\* 10:57:25 11/5/2012

Target Operating System Version: 1.6.1.0 DS200 Firmware Version: 1.6.1.0 Power Management Firmware Version: 1.2.4.0 Scanner Firmware Version: 2.22.0.0 Machine ID: 3159 Serial ID: 073223456 MAINE 11/6/2012 General Election **0006 Waterville Precinct 1** Election Date: November 6, 2012 Maximum Number of Types: 1 Number of Precincts: 1 Number of Ballot Face Styles: 9 Audit Log Entries: 34/21043

System Configuration: Election Results Printing: Enabled Election Results Transferred: NO Diverter Installed: YES Unreadable Marks Setting: Reject Report Type: SUMMARY Ability to ReOpen Polls: YES Report Format: Poll Report Report By Rotation: NO

Election Configuration: Ballots by Style: YES **Overvoted Ballots: Query Blank Ballots: Query Cross-over Ballots: NO** Single Over-Vote: NO Divert Blanks to Writein Bin: NO Response Type: OVAL Use Separate Non Party Type: NO Language: E Save Ballot Images: N Suppress Race Title: N

# Ballot Information:Inches:14Rows:36Columns:3Ballot Sides Defined: 2Support Type:Election Day

Page 7

#### Checking the Scanner's Battery

The DS200 uses an 18-volt, 5 amp lithium ion battery to power the scanner in case of an electrical power failure. A fully charged battery can power an active scanner for two to three hours.



1. To externally check the charge of the backup battery, view the indicator light at the back of your DS200 machine.



- Green Light = Battery is charged
- Amber Light = Battery is charging
- Flashing Red Light = Battery is defective or not hooked up
- **2**. You can also check the battery charge on the screen by viewing the Battery Power Icon on the touch screen.

intigled DS200	07/28/2009 14:24:52	0 # M 9	$\square$
Election Test	Administration Menu Firmware Update		A SHA
Diagnostic Reports	•	Diverter Diagnostics	BATTERY POWER ICON
System Settings	Ballot Diagnostics	Printer Diagnostics	
	Previous		

	Full Charge (green)		50% Charge (orange)
	75% Charge (yellow)		25% Charge (red)
Charging the Scanner's Battery			

It may take up to seven (7) hours to charge the scanner's battery. Plug the scanner into an outlet and turn on the machine. An election definition flash drive is not required to charge the battery and should not be left in the tabulator while charging.

## The Administration Menu

The Administration Menu can be accessed to complete set up and testing on the DS200. **DO NOT** open polls for pre-election set-up and testing.

**1**. Press the ARROW button in the lower right-hand corner.



□ 2. At the next screen, choose the GO TO ADMIN button which will bring up a keyboard.



□ 3. Enter the password to access the Administration Menu. Then press ENTER .

## Setting the Date and Time

□ 1. From the Administration menu, select **SYSTEM SETTINGS** to access the System Settings menu.

**2**. On the Systems Settings Menu, press DATE and TIME.



	System Settings
Top CIS Threshold	Calibrate Scanner Date & Time
Bottom CIS Threshold	
	Previous

□ 3. Adjust the time zone (EST5EDT), date, time or time format (i.e. 12 hour time). Press the button of the information to be changed to access the data to be changed.

4. Press **PREVIOUS** when you have set the correct information.

**5**. Press **ACCEPT NEW TIME** to save the information.

**NOTE:** Any changes to the Time Zone will prompt the DS200 to automatically power down. The user will need to power up the equipment using the power button. The time zone should be changed BEFORE the date and/or time.

#### Testing the Election Definition

Options from the Election Test Menu are used to verify the election definition and check the system counting logic.

- □ 1. If not already in the Administration Menu, press the arrow button in the lower right hand corner the press then GO TO ADMIN button to access the Administration Menu.
- **2**. Choose **ELECTION TEST** from the Administration Menu.
- **3**. Select SCAN BALLOTS from the Election Test Menu.



- □ 4. Insert the Test Deck of ballots into the scanner one at a time. The DS200 can scan ballots inserted in any orientation. As ballots are scanned, the Election Test Count will increase by one for each ballot inserted.
- □ 5. After you finish scanning test ballots, press the **PREVIOUS** button to return to the Election Test Menu.

6. From the Election Test Menu, the following options are available to generate reports for testing. Print the **PRECINCT REPORT SUMMARY** to compare to your hand tally.

- Precinct Reports these reports includes the results for each contest broken down by precinct. The Media report will not include counts for over and under votes while the Summary report will break out those counts.
- Status Report this report includes the number of ballots processed, the ballots counts for each precinct and the totals for the polling place.
- Poll Reports – these reports includes results for all precincts in a single report. The Media report will not include counts for over and under votes while the Summary report will break out those counts.

**7**. Verify your results by comparing the hand tally of the Test Deck results to the DS200 printed report results.

- If the results match, zero totals (see instructions below), and then press Shutdown to turn off the DS200.
- . If the results do not match, review the test ballots and the hand tally for errors, zero the totals and repeat the test.
- If the results do not match after the 2<sup>nd</sup> test, contact the Elections Division or ES&S.

## **Clearing the Test Results**

- 1. From the Election Test Menu, choose **ZERO TOTALS**.
- 2. Confirm you want to zero totals by pressing YES.
- **3**. An audible alert will sound showing the counters were cleared. Press OK to return to the Election Test Menu. Then press PREVIOUS to return to the Administration Menu.

#### Shutdown

Shutdown the DS200 by pressing SHUTDOWN. Secure the DS200 as instructed.

**WARNING:** Do Not Remove the DS200 flash drive before the equipment is completely powered off (the Power button will not be luminated). Prematurely removing the flash drive could result in damage to the equipment.

It is only necessary to calibrate the scanner or touch screen if there is a problem with scanning the ballots. Contact the Division of Elections or ES&S before completing these steps to determine if it is necessary.

# Calibration of the Scanner

- 1. From the Administration menu, select **SYSTEM SETTINGS**.
- **2**. From the System Settings menu, select CALIBRATE SCANNER.



**3**. The Calibrate scanner window (not shown) appears. Press **CONTINUE**.

WARNING: Do not turn off the DS200 while the scanner is calibrating.



□ 4. Once complete a successful message will appear. Press CONTINUE to return to the previous screen.

#### Calibration of the Touch Screen

**NOTE:** The DS200 should be off to begin the calibration process.

- □ 1. The DS200 unit is programmed to automatically power up when you raise the LCD screen. If your DS200 does not power up, unlock the switch door covering the power button.
- **2**. Unlock the access door, located above the printer.
- **3**. Press the bottom button labeled **POWER** to turn on the DS200.
- 4. Once the DS200 has powered up, press and hold the CLOSE POLLS button (top button) until the button lights up. The calibration screen will appear.

**NOTE:** You must IMMEDIATELY press and hold the Closed Polls button once the DS200 initializing screen appears.

intişliect DS200 04/24/2007 01:43:12pm 💷 🗇 💥 🐹
ES&S DS200 SYSTEM INITIALIZING
ELECTION SYSTEMS & SOFTWARE
DS200 SYSTEM
COPYRIGHT (C) 2007
ALL RIGHTS RESERVED VER: 1.0.0.0.48
PRESS CLOSE POLLS TO CALIBRATE SCREEN
7

 $\Box$  5. On the calibration screen, press the circle in the upper-left corner. The circle will turn black. Then press the circle in the lower-right corner that circle will turn black and a confirmation screen will appear.



**6**. From the confirmation screen press **SAVE & EXIT** to save the calibration settings or press **RECALIBRATE** to repeat the calibration process.

X:00631 Y:00411
Test the calibration by touching the screen and see if the pointer will follow the touch points.
Press the Recalibrate button on the screen to recalibrate the touch screen.
Press the Save & Exit button to save the calibration and return to the menu.
Calibration will restart after 30 seconds if no buttons are pressed.
*
Recalibrate Save & Exit