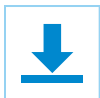# DS450®

PRODUCT INFORMATION

The DS450 central scanner and tabulator offers customizable sorting and the ability to process more ballots in less time — 72 double-sided 14-inch ballots per minute —without stopping for overvotes, write-ins or blank ballots.

Digital media assets, including pictures, videos, security documents and our marketing one-sheets are available for download at:
essvote.com/download-media-assets-ds450

KEY FEATURES & BENEFITS

PAPER PATH JAM MANAGEMENT

The DS450's c-curve technology is designed to help ensure ballots lay flat in the ballot box, which has proven to reduce ballot jams. The LED light tracking feature enables easy management of ballot jams and prevents the need to rescan an entire batch.

TOUCH SCREEN DISPLAY

The DS450 features a user-friendly software interface on an easy-to-use 15-inch LCD color touch screen display that walks the operator through every step of the tabulation process.

PATENTED TECHNOLOGY & CUSTOMIZABLE SORTING

The DS450 combines the ES&S-patented Intelligent Mark Recognition (IMR™) and patented Positive Target Recognition & Alignment Compensation (PTRAC®) software to ensure ballots are read accurately and consistently, protecting voter intent and eliminating manual adjudication time. The unit offers three separate bins for automatic adjudication and customized sorting. The DS450 can separate ballots for a variety of reasons, like write-in votes, overvotes, or blank ballots, without losing speed.

HIGH THROUGHPUT

Speed and ease of use make the DS450 ideal for rapidly and accurately processing mailed-in ballots. The DS450 scans, tabulates, automatically adjudicates and sorts 14-inch double-sided ballots at 72 per minute, eliminating the need to hand-feed ballots one-by-one.

FOLDED BALLOT PROCESSING

The DS450 is designed with a series of TruGrip™ rollers, which maintain constant contact with the ballot surface, ensuring quality control throughout the entire tabulation process.
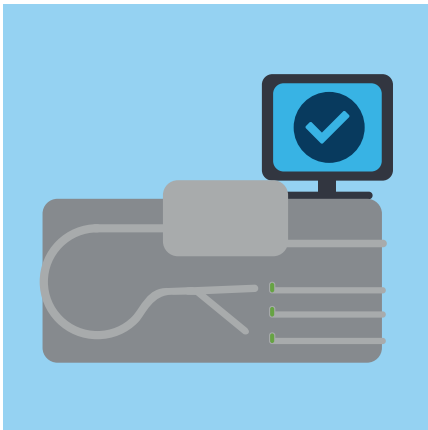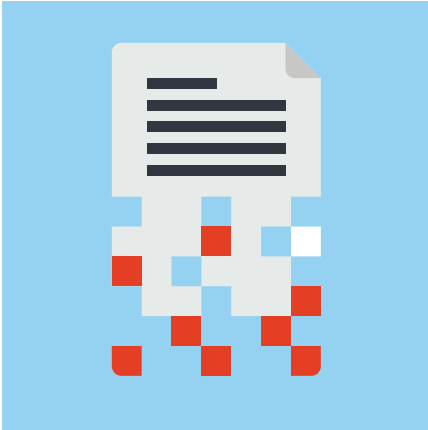
DS450®
Security Facts

PHYSICAL SECURITY & USER AUTHENTICATION

» Tamper-evident devices (wire seals, plastic pin seals, etc.) imprinted with identification numbers are used for securing the unit and alerting election officials of unauthorized access while the unit is in storage, transport, preparation and operation. The power button, critical hardware components, data ports and USB flash drives are protected behind lockable doors that can be sealed to alert election officials of unauthorized access. These physical locks and seals are a first line of defense, and minimize the effect of any unauthorized access.

» The operating software provides security access controls to limit and detect access to critical system components, guarding against system integrity loss and availability. Access codes are required for system access during equipment preparation, testing and operation. These safeguards cannot be bypassed or deactivated during system installation or operation, maintaining the integrity of the election data and audit record.

SYSTEM APPLICATION SECURITY

» The DS450 is a purpose-built voting device, designed, manufactured and programmed for its specific functions. Its system functions are only executable during election events, in the manner and order intended by election officials performing their duties. All administrative functions are limited to the touchscreen controls and data ports, and the device has no capability to write or allow change to the election program once installed.

ENCRYPTION & DATA INTEGRITY VALIDATION

» The DS450 will only accept certified and approved USB flash drives that contain encrypted data sealed with the correct, FIPS-compliant, signed data key. As such, once an election official installs election programming, it is not possible for a separate device to interface with the DS450 in order to overwrite or change the election definition or system firmware.

» The DS450 also generates a signed data key, ensuring that should unauthorized access of a unit occur, no other units can be affected through data transfer.All data generated during the polls is encrypted and digitally signed. Additional hash validations ensure data integrity remains intact.

» The DS450 is a paper-based system which maintains paper vote records and takes digital images of each processed ballot.

VERIFICATION

» The DS450 generates a detailed audit log of all actions and events that have occurred on the unit, which can be printed at any time. Every action and event, including access attempts, access of system functions and errors, is logged and timestamped. Audit logs may be saved to a USB flash drive. Activity on the DS450 is recorded to the audit log, and the DS450 simultaneously prints the real-time contents of the audit log to the attached audit printer.