2.08 - Democracy Suite® ImageCast® X System Operations Procedures

Version: 5.17-CO::3

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CHAPTER 1: INTRODUCTION

This document explains operating functions and modes of the ImageCast® X device. The sections labels are based on Section 2.8 of the VVSG 1.0 Volume II document.

1.1 Relevant Disclaimers

This document may make reference to certain Democracy Suite functionalities that are not part of the current 5.17-CO campaign and should be disregarded throughout the document.

For a full list of relevant disclaimers, please see the "Relevant Disclaimers" section in the *2.02 - Democracy Suite® System Overview* document.

1.2 Document Use

This document is intended for use with the Democracy Suite® 5.17 platform.

1.3 Applicable Documents

VVSG 1.0, Volume II, Version 1.0, Section 2.8 - System Operations Procedures.

1.4 Document Organization

Every effort has been made to reproduce the document structure indicated in the VVSG 1.0 requirements.

1.5 Design Responsibility

Dominion Voting is the design authority.

1.6 Patent Status

Certain system concepts, as well as many implementations and construction details, are protected by a series of U.S. and foreign patents pending.

CHAPTER 2: OPERATIONAL ENVIRONMENT

The vendor shall describe the system environment and the interface between the user or operator and the system - VVSG 1.0 volume II section 2.8.2. The vendor shall identify all facilities, furnishings, fixtures, and utilities that will be required for equipment operations.

NOTE: Facilities, furnishings, fixtures, and utilities are described in *2.09 Democracy Suite* ® *ImageCast*® *X System Maintenance Manual.*

2.1 System Interface

The ImageCast ® X (ICX) platform consists of following elements:

ICX device:

- Avalue SID-21V
- Avalue SID-15V
- Avalue HID-21V-BTX-01R
- Avalue HID-21V-BTX-B1R
- Avalue HID-21V-BTX-L1R

Printer (BMD):

- HP LaserJet Pro M402dne
- HP LaserJet Pro M402dn
- HP LaserJet Pro M404dn
- HP LaserJet Pro M501dn
- HP LaserJet Pro 4001dn
- AVision AP3061

UPS:

- APC Smart-Ups 1500VA LCD 120V
- CyberPower UPS 1500VA LCD 120V (PR1500LCD and PR1500LCD-VTVM)

VVPAT device (DRE):

- KFI VRP3
- KFI VRP3 V1-C

NOTE: Please refer to the Voter-verified paper audit trail (VVPAT) Model: VRP3 User Guide for any additional information.

Thermal printer (DRE):

- KFI NAUT 324C
- Seiko RP-D10

Smart Card Reader:

- Advanced Card Systems Ltd ACR-39U

Smart Card(s):

- Advanced Card Systems Ltd ACOS6

USB media (DRE):

- Centon - 8 GB DataStick Pro - S4-CM-U3P2-8.1
- Centon - 8 GB DataStick Pro - S4-CM-U2P5-8.2
- Centon - 16 GB DataStick Pro - S4-CM-U3P2-16.1
- ATP - 8 GB NanoDura - AF8GUFNDNC-AADXX
- ATP - 16 GB NanoDura - AF16GUFNDNC-AADXX
- Aegis - 30 GB Secure Key 3.0 - ASK3-NX-30 GB
- Aegis - 32 GB Secure Key 3.0 - ASK3-NX-32GB
- Aegis - 120 GB Secure Key 3.0 - ASK3-NX-120 GB
- Aegis - 128 GB Secure Key 3.0 - ASK3-NX-128GB
- Apacer - 8 GB
- Apacer - 16 GB

AVS (optional):

- ATI
- Sip and Puff
- Paddles

For universal accessibility, the ICX is equipped with an additional accessible voting feature for voters who cannot negotiate a paper ballot (i.e. the visually or physically impaired). Along with the touchscreen tablet, accessible voting sessions can be achieved with the use of a hand-held controller and a set of headphones that connect to the ATI via appropriate connections.

The device has two main modes of operation:

- Ballot Marking Device (BMD) - When the voter has completed the voting session, the system then prints the marked ballot according to the voter's selections. Ballots are later scanned and tabulated by the Democracy Suite ® ImageCast ® Central optical ballot counter.

- Direct Recording Electronic device (DRE) with or without VVPAT - When the voter has completed the voting session, the system then stores their votes electronically. Votes can later be transferred and tabulated by Democracy Suite $^®$ Results Tally and Reporting.

2.1.1 Polling Place

The vendor shall identify all facilities, furnishings, fixtures, and utilities that will be required for equipment operations. - VVSG 1.0 vol II sec 2.8.2.

NOTE: Facilities, furnishings, fixtures, and utilities are described in *2.09 - Democracy Suite$^®$ ImageCast$^®$ X System Maintenance Manual.*

The following facilities, furnishings, fixtures, and utilities are required at the polling place in order to efficiently operate the ICX:

- Table where ICX will be placed including all required equipment and voting booths
- ICX content:
- ICX device - Avalue 15.6" or Avalue 21.5" and its power adapter
- Smart Card Reader
- ACOS 6 Smart Cards for
    - Poll Worker
    - Technician
    - Voter
- BMD printer
- UPS
- USB media (DRE)
- VVPAT (DRE)

NOTE: Please refer to the Voter-verified paper audit trail (VVPAT) Model: VRP3 User Guide for any additional information.

- Thermal Printer (DRE)
- Accessibility equipment:
- Headset
- Joystick
- Paddles
- Sip and puff
- 120 Volt AC power outlet

- Surge protector
- An extension cord that is long enough to cover the distance between the AC power outlet and the ICX
- Voting booths to preserve voters' privacy during a voting session
- Ballot transfer cases for transporting marked ballots to election headquarters after the close of voting (BMD)
- Ballot box(es) (BMD)
- Extra packages of printer paper (BMD)
- Extra printer cartridges (for the appropriate printer - BMD)

2.1.2 Voting Booth Set Up

When the ICX is placed in working position, to enable voter's privacy, the voting booth should be positioned behind the ICX with the open side of the privacy surround facing a wall without a window and the area between the wall and the open side of the privacy surround are vacant while the voter is using this accessible voting station.

The immediate surface area must be available for the voter's unobstructed use with accessibility device (i.e. sip and puff or paddles). The assistive device must be positioned within the front half of the designated accessible voting area, on a horizontal surface with buttons facing up.

The cables for accessible devices can be routed through a cable access hole or space at the rear area of the designated accessible voting booth.

The accessible voting station should provide a clear floor space of 30 inches (760 mm) minimum by 48 inches (1220 mm) minimum for a stationary mobility aid. The clear floor space shall be level with no slope exceeding 1:48 and positioned for a forward or a parallel approach.

CHAPTER 3: SYSTEM INSTALLATION AND TEST SPECIFICATIONS

Please refer to the following documents:

- *Democracy Suite® ImageCast® X Prime System Installation and Configuration Procedure*

- *Democracy Suite® ImageCast® X Classic System Installation and Configuration Procedure*

- *2.07 - Democracy Suite® System Test and Verification Specification*

CHAPTER 4: OPERATIONAL FEATURES

Please refer to the following documents:

- *2.05 - Democracy Suite® ImageCast® X Software Design and Specification*

- *Democracy Suite® ImageCast® X User Guide*

CHAPTER 5: OPERATING PROCEDURES

Please refer to the following documents:

- *2.05 - Democracy Suite® ImageCast® X Software Design and Specification*

- *Democracy Suite® ImageCast® X User Guide*

CHAPTER 6: OPERATIONS SUPPORT

This section explains the following system operating procedures:

- Requesting Support

- Prioritizing Support (Impact Levels)

- Modifications Needed to Coordinate Any Modified or Upgraded Software With Other Software Modules

- Technical Support Procedure

6.1 Requesting Support

When requesting support from Dominion Voting Systems, customers can use the following methods. The options listed below appear in order of efficiency.

- Enter your issue directly into Dominion Voting's support database via http:// online.dominionvoting.com/customerportal/

- Email the issue directly to Dominion Voting's support team. In the email message, the following details are mandatory:

  - Name

  - Contact telephone with extension

  - Location

  - Detailed description of the problem

The support technician will record the issue in Dominion Voting's Customer Portal database and either resolve it on the spot or assign it to an appropriate resource for action. Once Dominion Voting's support team creates the ticket in the Customer Portal system, an email message will automatically be sent to the customers' primary contact email address notifying them that the ticket has been created.

6.2 Prioritizing Support (Impact Levels)

All support request/issues are dealt with according to their priority, which is determined depending on their impact levels.

- Impact Level 1

- Impact Level 2

- Impact Level 3

6.2.1 Impact Level 1

Impact Level 1 is the highest priority support situation and is assigned when one or more of the following conditions occur:

- Multiple users (two or more) are directly affected.

- The IT resource cannot function as designed and installed.

- A problem has a critical impact on the customer's tasks.

- A temporary workaround, alternative, or circumvention is not available.

The first Dominion Voting response must occur within one hour of the service interruption. The Dominion Voting support team will establish definitive contact with the customer's primary contact and maintain contact throughout the interruption. The maximum time for resolution is targeted at four elapsed hours (work will continue after regular working hours or on weekends), or as specified in the customer contract covering the requested service.

6.2.2 Impact Level 2

Impact Level 2 describes a medium priority support situation and is assigned when some or all of the following conditions occur:

- Limited (two or less) users are directly affected.

- IT resource is available with degraded performance and/or is difficult to use.

- A temporary workaround, alternative, or circumvention is available.

- The loss may restrict function and have some operational impact, however, the situation is not critical.

Dominion Voting will respond within 1 working day. The maximum time targeted for resolution is 40 working hours from the time of Dominion Voting's initial response. Dominion Voting will escalate the problem to the next level and group manager if the targets for response and resolution are not met.

6.2.3 Impact Level 3

Impact level 3 describes a low priority support situation, and is assigned when some or all of the following conditions occur:

- The problem resolution specifies that a system component or software upgrade is necessary, or a design change is required.

- The customer has requested additional information pertaining to a problem or a feature of the system or service.

Dominion Voting will first respond within 2 working days. There is no target time for a resolution, but a reminder email will be issued to the assignee once the ticket has been assigned, as well as every time the status of the ticket changes as it is acted upon.

6.3 Modifications Needed to Coordinate Any Modified or Upgraded Software With Other Software Modules

Democracy Suite software and any subsequent release are released according to Dominion Voting's Release Management procedure and other conventions (refer to TDP *2.11 - Democracy Suite® Configuration Management Plan*) and the client is supplied with the full package ready for installation.

Dominion Voting's software components are mutually independent installation-wise and do not need to be coordinated. Each is delivered, installed and configured as a standalone component. Therefore, if there is a need to upgrade any of the software or deliver a new version of the same version, installation procedures must be followed. Should there be a need to coordinate the software components in the future, the appropriate procedures will be documented and delivered to the client.

6.4 Technical Support Procedure

The initiator reports the issue by requesting support as mentioned in section "Requesting Support". The Dominion Voting support team members create the ticket that, at the minimum, must include the following information:

- Client name

- Name of the ticket

- Detailed description of the issue

- Configuration Item affected

A ticket contains information about support interventions made by the Dominion Voting support team on behalf of an end user who has reported an incident. Each ticket has a unique reference number, which is used to allow the user or support staff to quickly locate, add to, or communicate the status of the user's issue or request.

Dominion Voting support reviews the ticket in order to determine how to act upon it. If the issue is diagnosed as a support query due to lack of user expertise or otherwise, then front line support will advise the initiator of the appropriate action

to take in order to resolve the issue and change the status of the ticket to 'Resolved'. All the changes to the ticket are recorded and can be audited throughout its life cycle.

If the issue is diagnosed as either a missing functionality or a defect that requires a software or hardware component upgrade, the support staff first evaluates if the issue is of critical priority (Impact Level 1). If it is deemed critical, the emergency fix will be triggered in order to ensure prompt resolution. An emergency fix is a fast-tracked release management procedure that enables rapid deployment of a necessary change.

In this process, only senior staff members have the authority to approve and deploy changes.

When a missing functionality or a defect is not critical, support assigns an appropriate priority level, resource, and status to the ticket. Depending on the nature of the issue for which the ticket has been created, the resolution may require a software or hardware upgrade or change. This, in turn, will trigger   the change request procedure. As a result, the RFC document is created, which is then considered during   the release planning stage to be scheduled for development. Once the RFC document is created, standard release management procedures apply.

The status of the ticket is used to track the progress of the issue and the initiator is kept informed throughout the life cycle of the ticket.

APPENDIX A: BASIC PRODUCT SAFETY AND INSTRUCTIONS ON WHERE TO APPLY SECURITY SEALS

- Basic Product Safety
- Instructions on Where to Apply Security Seals

A.1 Basic Product Safety

Please refer to the following documents for operating parameters:

- Avalue SID-15V manual
- Avalue SID-21V manual
- Avalue HID-21V (Prime) manual
- HP LaserJet Pro M402dn printer manual
- HP LaserJet Pro M404dn printer manual
- HP LaserJet Pro M402dne printer manual
- APC Smart-Ups 1500VA LCD 120V UPS manual

A.2 Instructions on Where to Apply Security Seals

The ImageCast® X device is secured within an enclosure that utilizes screws with a proprietary head design to capture the tablet device between a front face frame plate and the enclosures back plate.

Covering two of these screws on opposing corners with an adhesive anti-tamper seal will ensure that access to the tablet device is prevented without an election officials knowledge.

Same security should be applied to the two screws at the bottom of the enclosure. Also, plastic pull-up/pull tight seals are used to secure the devices.

In the case of the ImageCast® X Prime device, 4 Plastic pull-up/pull tight seals are used to fasten the 4 doors on the back sides of the device enclosure.

NOTE: A seal is guided through each of the hasps in order to fasten the doors.

NOTE: Please note that adhesive-back seals need to be added to all doors on the backs of ImageCast® X devices.

The ImageCast® X Classic device has 2 doors on the back side of the enclosure, and the Plastic pull-up/pull tight seals are also used to fasten them.

The ImageCast® X Prime device has 4 doors on the back side of the enclosure, and the Plastic pull-up/pull tight seals are also used to fasten them.

The same protection is applied to the VVPAT - a plastic pull-up/pull tight seal is guided through the hasp in the top right corner of the printer, on the front side.

NOTE: Please refer to the Voter-verified paper audit trail (VVPAT) Model: VRP3 User Guide for any additional information.

Figure A-1 to Figure A-5 show how the plastic seals should look when used on the ImageCast® X Classic device, as well as what an adhesive seal that's been tampered with looks like.
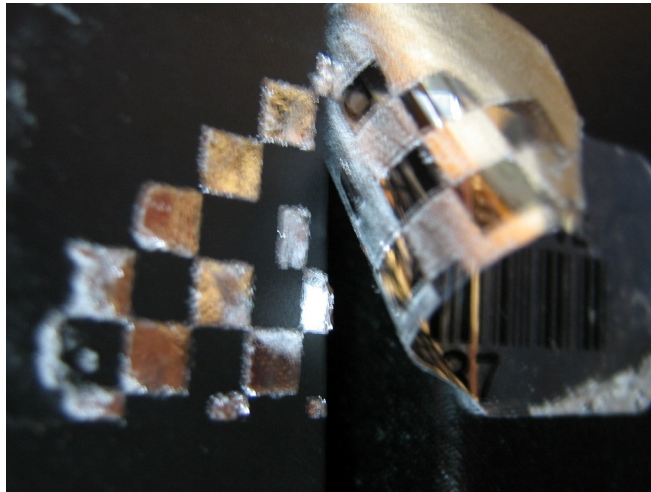

Figure A-1: Evidence of Tampering: Peeled Label

Figure A-2: Evidence of Tampering: Peeled and Reapplied

Figure A-3: Top Avalue security latch seal

Figure A-4: Bottom Avalue security latch seal

The images below show how the plastic seals should look when used on the ImageCast® X Prime device.

Figure A-5: ImageCast® X Prime security seals

REVISION HISTORY

Rev.	Date	Summary
3	04-14-2023	• Revised using 5.17-CO doc revisions
2	04-05-2023	• Revised with grammar and content corrections
1	02-13-2023	• Branched for 5.17-CO

LIST OF FIGURES

VVSG Trace List

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