

May 9, 2016

National and Local Elections
Voting Procedure under AES

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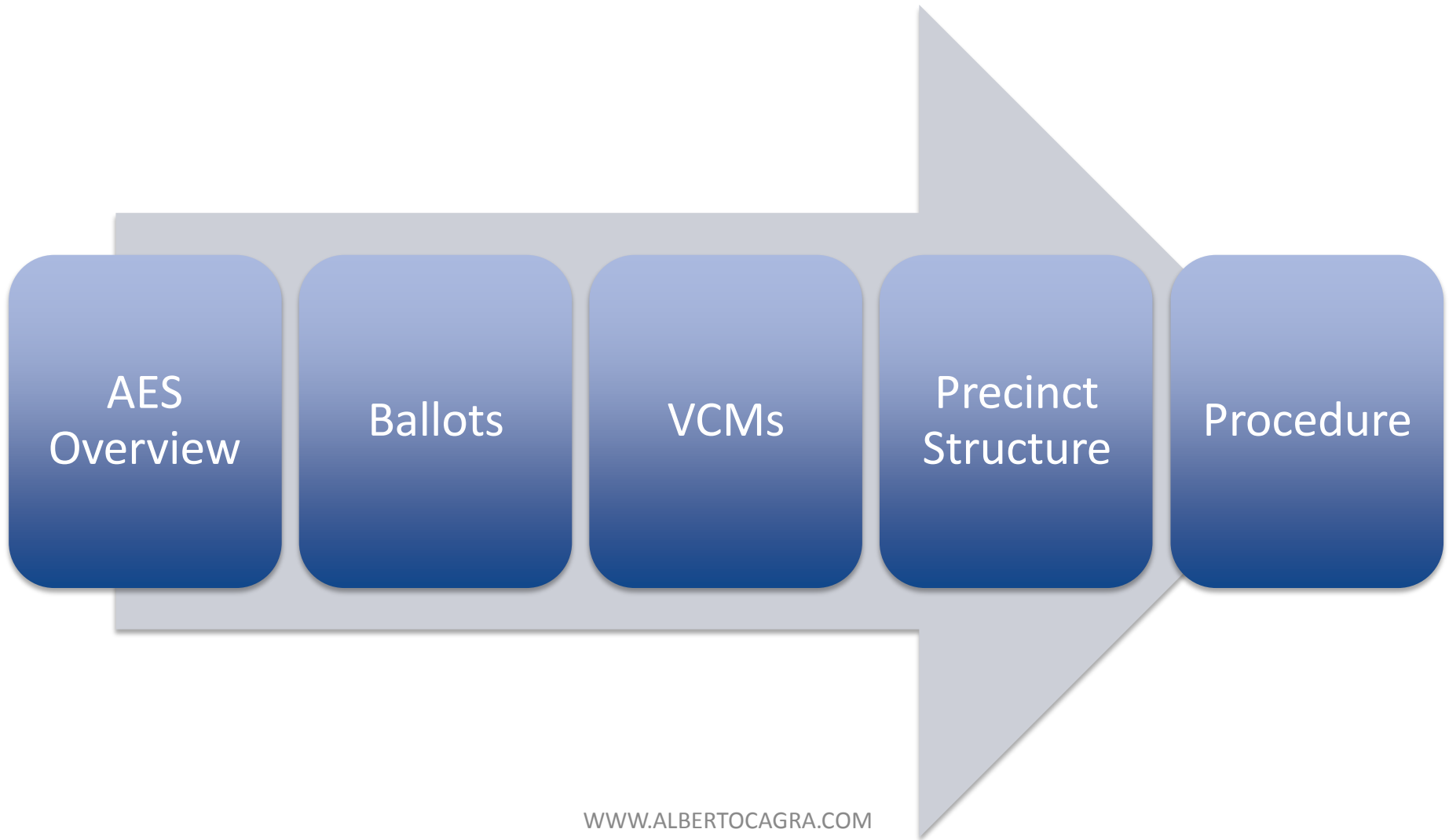
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Management, Ateneo School of Government

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General and Government Corporate Counsel

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Flow of Presentation



1) Overview of AES



- **Statutory Bases:** RA 9369 amending RA 8436
- **Automated Election System:** voting, counting, consolidating, canvassing, and transmission (not proclamation)
- **Paper-Based or Direct Recording Election System:** Ballots, Election Returns, Certificate of Canvass, Statement of Votes
- **Comelec Discretion:** AES or AESs, Paper-Based or Direct Recording

1) Overview of AES



— **Features:** Use of Ballots, Stand-alone machine, with Audit Trails, Minimum Human Intervention and Security Measures

— **Processes:**

1. Casting, Counting and Transmission at Precinct Level
2. Consolidation and Proclamation at Canvassing Levels

1) Overview of AES



- **Precinct-Level Result:** Printing of Elections Returns (30 copies) then Electronic Transmission to Board of Canvassers; Results loaded in Data Storage Devices (SD Card)
- **Canvassing at BoC:** Consolidation of Results in Data Storage Devices then Electronic Transmission to Comelec (Senate and Party-List) and Congress (President and Vice-President) and Proclamation

PARAAN NG PAGBOTO

- (1.) Itiman ang loob ng oval: ● sa tabi ng pangalan ng kandidatong napili.
- (2.) Gumamit lamang ng "marking pen" sa pagmarka.
- (3.) HUWAG bumoto ng labis sa nakatalagang bilang sa napiling posisyon.

Signature of Chairman

2) Paper-Based Ballots

- 1 Ballot: 1 Voter
- Number of Ballots per Precinct: Number of Voters
- Ballot Face:

PRESIDENT / Vote for 1			
<input type="radio"/> 1. BINAY, JOJO (UNA)	<input type="radio"/> 3. DUTERTE, RODY (PDPLBN)	<input type="radio"/> 5. ROXAS, MAR DAANG MATUWID (LP)	
<input type="radio"/> 2. DEFENSOR SANTIAGO, MIRIAM (PRP)	<input type="radio"/> 4. POE, GRACE (IND)	<input type="radio"/> 6. SEÑERES, ROY (WPPMM)	

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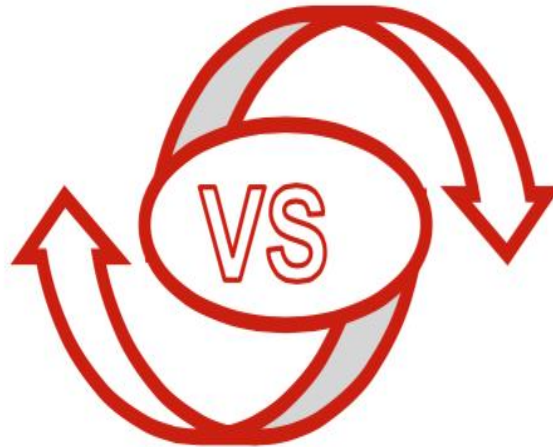
PRESIDENT / Vote for 1			
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3) Vote-Counting Machines (VCMs)



- USES PASSWORDS & PERSONAL IDENTIFICATION NUMBERS (PIN)
- USES 3 DIGITAL SIGNATURES





Monitor is smaller (4.72") and black & white

120 mHz processor, 128-bit security

Uses CF cards that can be easy to disable

Non-simultaneous saving of data

Small external battery pack with an 8-hour life

No self-diagnostic lens

WILL NOT BE USED IN 2016

Monitor (colored 7") allows voter verification of votes

1GHz processor; 256-bit security

Uses SD cards that are more robust

Simultaneous saving; data corruption less likely

Larger spare battery with a 14-hour capacity

Self-diagnostic lens prevents digital lines

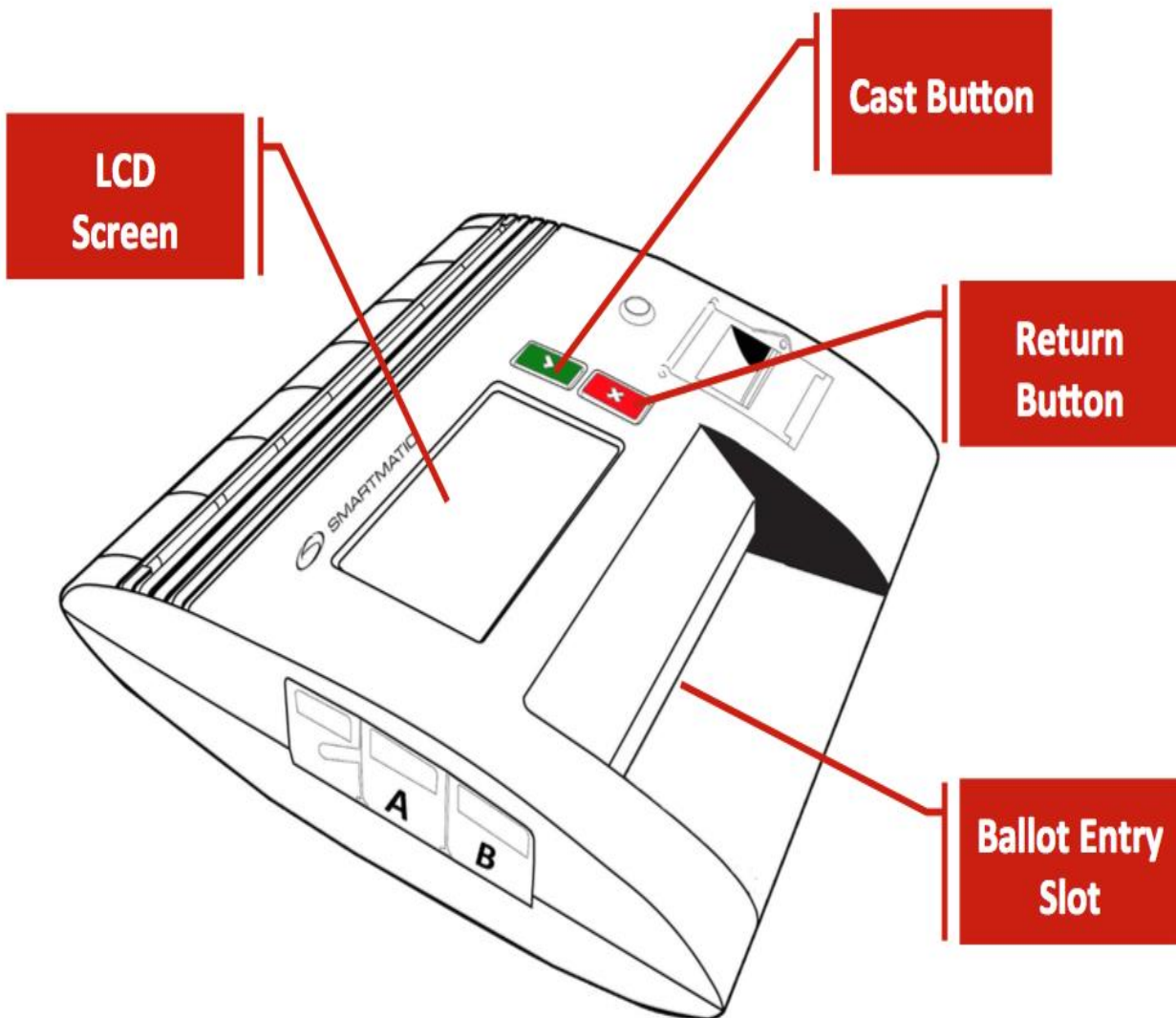
USED IN ALL PRECINCTS IN 2016

ABOUT THE VCM

PCOS V. VCM

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Liquid Crystal Display (LCD) Screen

- an 8" diagonal viewing area and touch screen capability for data and system navigation input purposes.

Cast Button

- has a check mark used to cast ballots.

Return Button

- has an X mark used to return ballots.

Ballot Entry Slot

- ballots are inserted and/or returned here



***iButton* Receptacle**

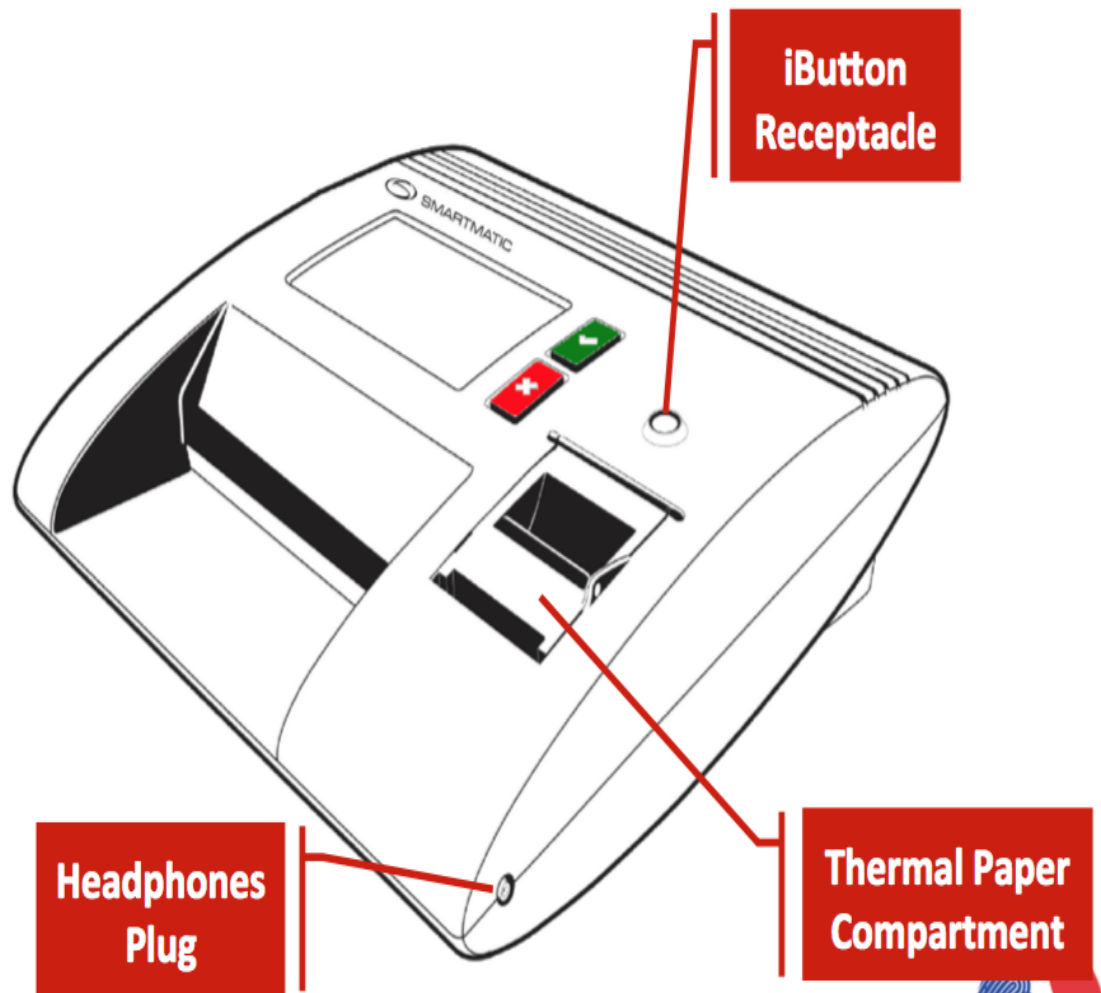
- contact point for the Security Key.

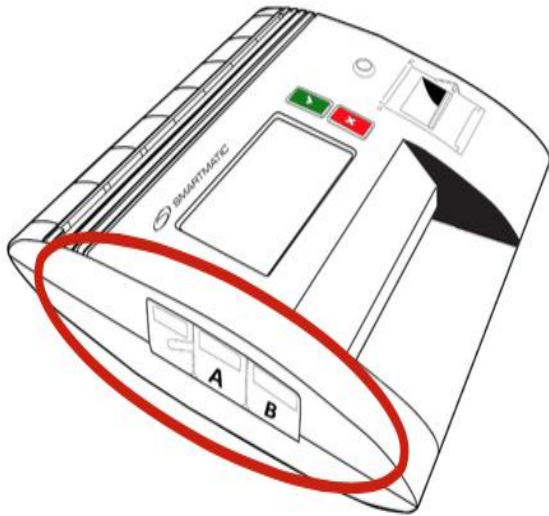
Thermal Paper Compartment

- designed to allow easy loading and reloading of the thermal paper.

Headphones Plug

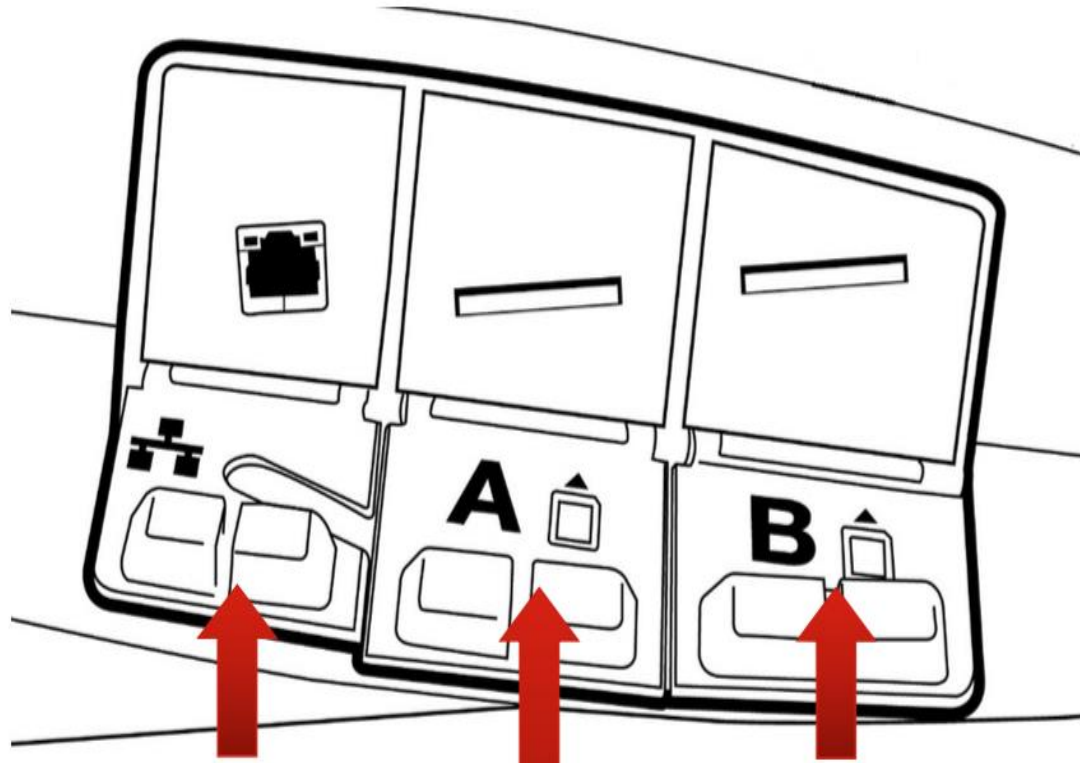
- used for audio review.





Ethernet Port

A port on the right-hand side of the machine. It is used for connecting the external device for results transmission.



Main Data SD Card Slot

This is where the removable main data SD card is inserted.

Backup Data SD Card Slot

This is where the removable backup data SD card is inserted.



4) Precinct-Level Structure



Board of Election Inspectors

- 3 (Chair, Poll Clerk and 3rd Member)
- Teachers or of known probity
- Not related within 4th degree
- Clustered Precinct: max. 800 voters/ 7 original precincts

Functions

- AE: conduct voting, electronic counting and VCM testing
- Print ERs
- Maintain Order
- Enforce lawful orders
- Call upon security force to take unruly person under custody
- Sign Ballot/ ER
- Transfer Venue of Counting

4) Precinct-Level Structure:

Pollwatchers



Candidates

Registered
Parties

Citizens' Arm

Other Groups

For Legislative
Bodies,
collectively 1

4) Pollwatchers: Requirements



- **Number:** Maximum of 2 per Precinct serving alternately
- **Proof:** Appointment and ID
- **Designation:** Appointment bears signature of candidate or representative of party (at least 15 days before May 9, names of representatives submitted to Election Officer)

4) Pollwatchers: Qualifications



1. a qualified (registered per Comelec) voter
2. of good reputation
3. not have been convicted by final judgment of any election offense or of any other crime
4. know how to read and write Pilipino, English, Spanish or any of the prevailing local dialects
5. not related within the fourth civil degree of consanguinity or affinity to BEI in the polling place where s/he seeks appointment as a watcher

4) Pollwatchers: Rights



- Stay in the space reserved for them
- Witness and inform themselves of the proceedings
- Take notes of what they may see or hear,
- Take photographs of the proceedings and incidents
- File a protest against any irregularity or violation of law and obtain a resolution thereof
- Get a copy of the ER (or Certificate of Votes)
- Vote when BEI decides to transfer venue of counting
- If belong to Dominant Party, closest to BEI

5) AES Procedures



- A. **Preliminaries:** 5:00 to 6:00 a.m.
 - 1. BEI sets up Polling Place
 - 2. Pollwatchers present credentials to BEI
 - 3. BEI posts Precinct Certified Voters List (PCVL)
 - 4. BEI shows sealed Vote Counting Machine (VCM) and empty Ballot Box to public
 - 5. BEI turns on VCM and logs in

5) AES Procedures



- B. **Voting Proper:** 6:00 a.m. to 5:00 p.m.
 1. Voters vote in the order of arrival
 2. Voter approaches BEI
 3. BEI verifies Voter identity
 4. BEI checks if fingers unstained with Indelible Ink (if stained, cannot vote)
 5. BEI announces name of Voter
 6. If no challenge or challenged dismissed, Voter signs in Election Day Computerized Voters List (EDCVL)

5) AES Procedures



Illegal Voter

- Not registered
- Use another name;
Disqualified
- Multiple Registrant
- *May be allowed to vote
if properly identified by
BEI*

Illegal Act

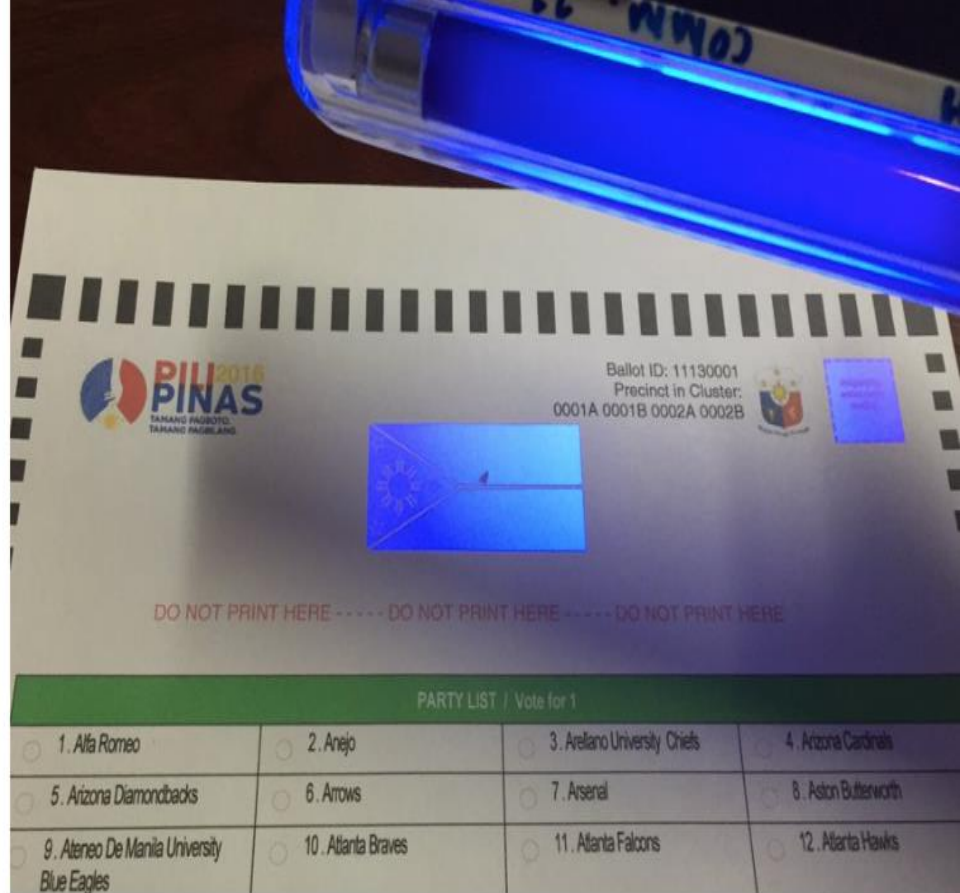
- Vote-Buying
- Vote-Selling
- Vote-Betting
- Promise to induce or
withhold vote
- *allowed to vote if take
oath*

5) AES Procedures



7. BEI Chair:
 - a) Signs Ballot in space provided
 - b) Gives Ballot inside Secrecy Folder and Marking Pen to voter
8. Voter votes by fully shading circles
9. Voter inserts Ballot in the VCM
10. Voter returns Secrecy Folder and Marking Pen
11. Ballot is accepted or rejected (given another Ballot if voter not at fault):
 - a) Misread Ballot (re-fed in 4 different orientations)
 - b) Previously Read Ballot (diverted to Bin for Rejected Ballot)
 - c) Invalid Ballot

- Ballot scans both sides simultaneously
- Ballots are identified by the machine (precinct specific) and are rejected if:
 - ✓ Fake/Photocopied/Duplicate;
 - ✓ previously inserted or scanned;
 - ✓ for another different precinct;
 - ✓ contains ambiguous marks



A word about the ballots...

- ✓ Appx 19" in length (Non-ARMM)
- ✓ Uses UV & barcode security;
- ✓ Every ballot is unique



Oval spaces – what voters shade when indicating their vote.

PRESIDENT / Vote for 1			
<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
VICE-PRESIDENT / Vote for 1			
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>



Make sure the ovals are FULLY shaded. Use the Marking Pens provided.



USING THE VCM

FILLING UP THE BALLOT



When you mark your choices this way, YOUR VOTES WILL NOT BE COUNTED.



PRESIDENT /Vote for 1			
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> <u>RIZAL, Jose</u>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
VICE-PRESIDENT /Vote for 1			
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>



Make sure the ovals are FULLY shaded. Use the Marking Pens provided.

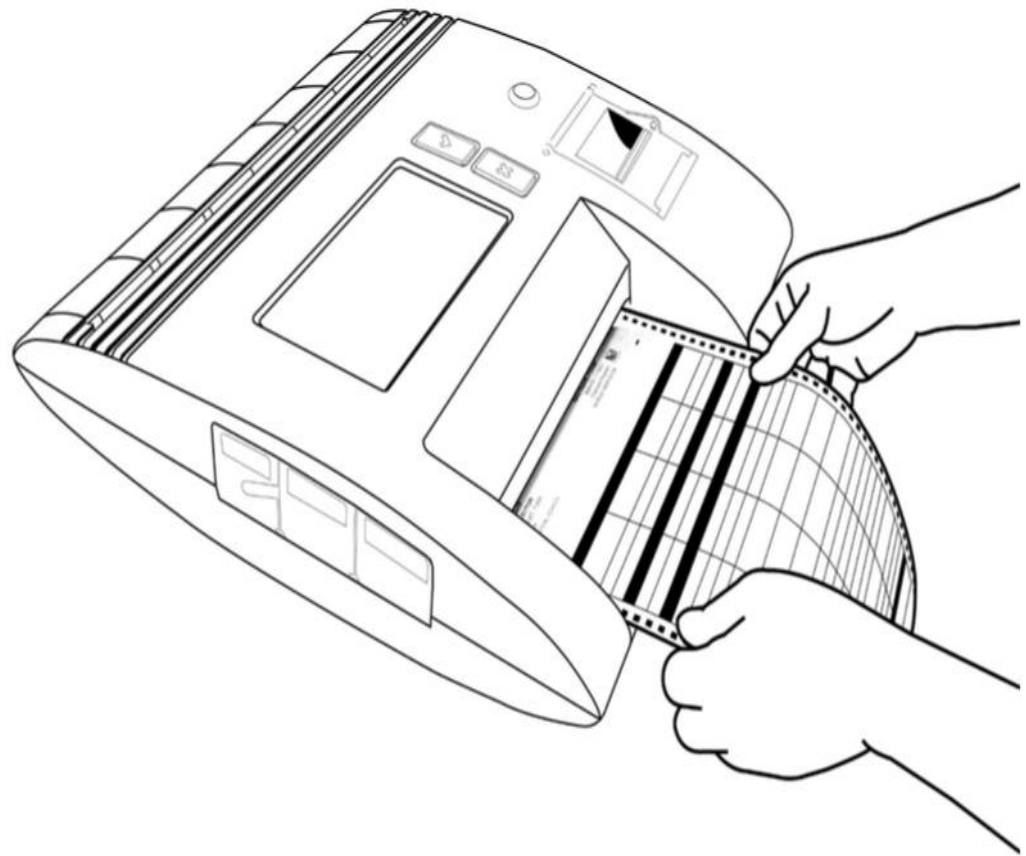


USING THE VCM

FILLING UP THE BALLOT



Ballot should be inserted gently into the ballot entry slot. Note that the ballot can be inserted in any of four orientations (EXCEPT SIDeways, OF COURSE :D)

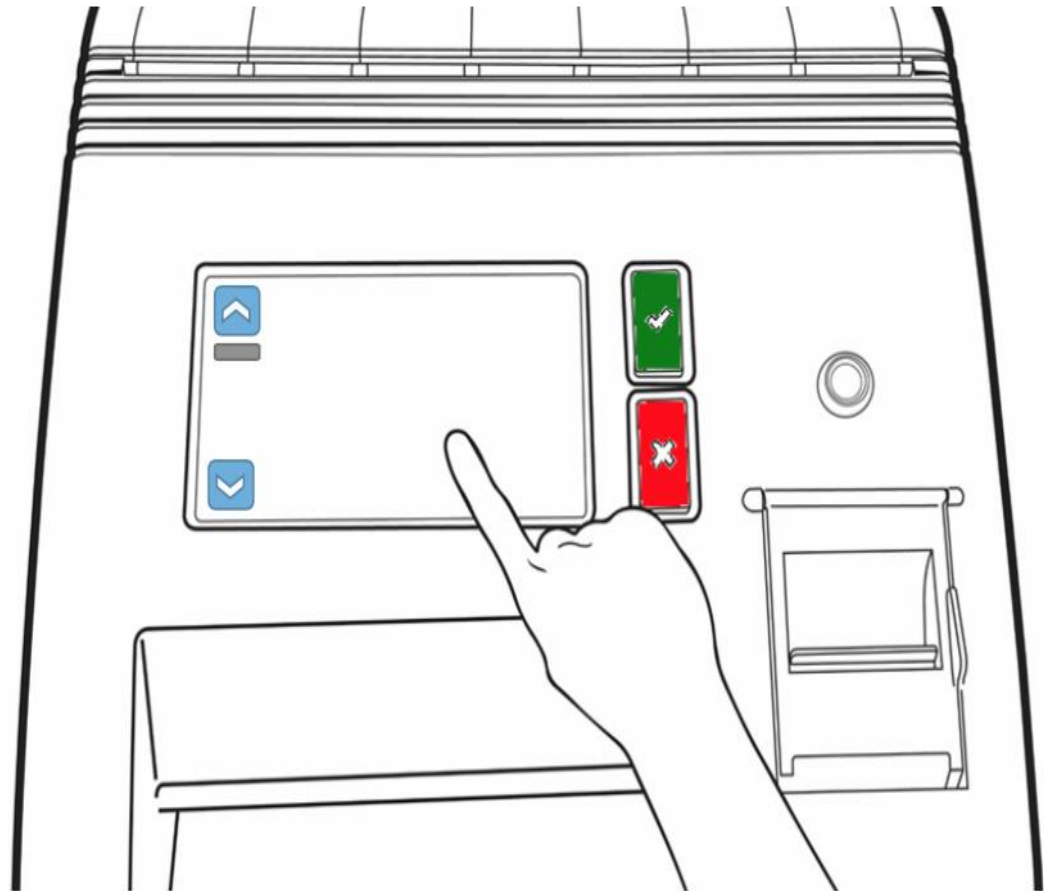


USING THE VCM

BALLOT CASTING



The voter can review the scanned ballot on the LCD screen. This is called "On-Screen Verification."



USING THE VCM

BALLOT CASTING

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Open

IP: unknown

Mon 28 Dec 2015 05:32 PM PHT

Please verify your vote



PRESIDENT

ACOSTA, Vetellano S.

To cast ballot, press

Para ipasok ang balota, pindutin



VICE-PRESIDENT

BINAY, Jejomar C.

SENATOR

ACOSTA, Jr. Nereus O.

DEFENSOR SANTIAGO,
Miriam P.

ESTRADA, Jinggoy E.

BAUTISTA, Martin D.

CAUNAN, Henry B.

LOOD, Alma A.

MAZA, Liza L.

IMBONG, Jo Aurea M.

LANGIT, Rey M.

PLAZA, Rodolfo G.

OCAMPO, Saturnino C.

PAI PARAN, Lovito Jr S.

To return ballot, press

Para ibalik ang balota, pindutin



Ballots cast: 2

Precinct code: 1113001



A voter has 15 seconds to check his vote. After 15 seconds, the VCM will automatically cast the ballot.



USING THE VCM

BALLOT CASTING / ONSCREEN VERIFICATION



Open IP: unknown

Mon 28 Dec 2015 05:29 PM PHT

Ambiguous marks detected

May malabong marka sa balota



PRESIDENT

AQUINO, Benigno Simeon III C.

To cast ballot, press

Para ipasok ang balota, pindutin



To return ballot, press

Para ibalik ang balota, pindutin



Ballots cast: 1

Precinct code: 1113001



AMBIGUOUS MARK

warnings occur when the VCM detects an unclear mark.

Possible Reasons:

1. Too lightly marked; must be darkened to be clearly counted.
2. Inadvertently made small marks in an oval. Voter intent, not clear.



USING THE VCM

BALLOT CASTING / ONSCREEN VERIFICATION

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Open IP: unknown

Mon 28 Dec 2015 05:27 PM PHT

Please verify your vote



ACOSTA, Vetellano S.

VICE-PRESIDENT

BINAY, Jejomar C.

SENATOR

ACOSTA, Jr. Nereus O. UNDERVOTE

UNDERVOTE UNDERVOTE

UNDERVOTE UNDERVOTE

UNDERVOTE UNDERVOTE

UNDERVOTE UNDERVOTE

UNDERVOTE UNDERVOTE



PARTY LIST

To cast ballot, press
Para ipasok ang balota, pindutin ▶

To return ballot, press
Para ibalik ang balota, pindutin ▶

Ballots cast: 0

Precinct code: 1113001



If the voter has for fewer than the number expected for a given contest, this is called an **UNDERVOTE**.





Open IP: unknown

Mon 28 Dec 2015 05:30 PM PHT

Please verify your vote



PRESIDENT

OVERVOTE

To cast ballot, press

Para ipasok ang balota, pindutin

VICE-PRESIDENT

BINAY, Jejomar C.

SENATOR

ACOSTA, Jr. Nereus O. DEFENSOR SANTIAGO,
Miriam P.

TRADA, Jinggoy E. BAUTISTA, Martin D.

MAN, Henry B. LOOD, Alma A.

Liza L. IMBONG, Jo Aurea M.

Rey M. PLAZA, Rodolfo G.

Saturnino C. PAI PARAN Iovito Jr S.

To return ballot, press

Para ibalik ang balota, pindutin

Precinct code: 1113001

OVERVOTE: When the voter has voted for more than the maximum number of votes allowed for a given contest.

VOTES CAST FOR OVERVOTED POSITIONS WILL NOT BE COUNTED.



BALLOT CASTING / ONSCREEN VERIFICATION



Open IP: unknown

Mon 28 Dec 2015 02:31 PM PHT

The scanner self diagnostic has failed.



To return ballot, press 

The paper inserted was misread.
Please verify the ballot and refeed.

Ballots cast: 0

V-1.0.0.888

A **MISREAD** warning means that VCM has not recognized the ballot.

Possible reasons:

- The ballot is physically damaged (torn, folded, crumpled or stained with water)
- The voter has made markings that obstruct certain identifying marks.





Open IP: unknown

Mon 28 Dec 2015 02:31 PM PHT

Paper Jam detected



Please remove any obstruction from the entry slot of the ballot

Ok

Ballots cast: 0

Precinct code: 11130001

PAPER JAMS or ballot blockages are rare events but can occur. The error message saying “Paper Jam Detected” will be displayed on the screen in this situation.



USING THE VCM

ERROR MESSAGES

An **INVALID**
BALLOT is a ballot
that belongs to a
different clustered
precinct. The VCM
is designed to
accept only the
ballots assigned to
it.

The screenshot shows a VCM interface with a dark grey header bar at the top. On the left side of the header, there is a lightning bolt icon, a lock icon, the text 'Open', and 'IP: unknown'. On the right side, it shows the date and time 'Mon 28 Dec 2015 02:31 PM PHT'. Below the header, the text 'Invalid ballot detected' is centered. A horizontal line is drawn below this text. In the center of the screen is a large yellow exclamation mark. To the right of the exclamation mark, the text 'To return ballot, press' is followed by a right-pointing arrow. Below this, the text 'Please ensure you received the correct ballot.' is centered. At the bottom of the screen, there is a dark grey footer bar. On the left side of the footer, it says 'Ballots cast: 0'. On the right side, it says 'V-1.0.0.888'. In the bottom right corner of the screen, there is a circular logo featuring a fingerprint and the Philippine flag.

USING THE VCM

ERROR MESSAGES



Open IP: unknown

Mon 28 Dec 2015 02:31 PM PHT

This ballot has been previously scanned



To return ballot, press



This ballot has been previously scanned.

Ballots cast: 3

V-1.0.0.888

PREVIOUSLY SCANNED BALLOT

A warning message displays when the VCM detects a ballot that has already been scanned. No votes will be counted for the ballot.



USING THE VCM


ERROR MESSAGES

A FAKE BALLOT can be detected when the scanner doesn't detect a ultra-violet (UV) mark on the ballot, and/or when the ballot has a different type of bar code than the one specified for the election.

  Open IP: unknown Mon 28 Dec 2015 02:31 PM PHT

Paper inserted was not an original ballot



To return ballot, press 

Ballots cast: 2 V-1.0.0.888



USING THE VCM

ERROR MESSAGES

5) AES Procedures



12. Voting Receipt (VR)

- a) Printed and given to Voter
- b) Deposited inside Box for Official Ballots
- c) If Voter objects, Voter signs at back of VR and placed in minutes

13. BEI applies Indelible Ink

14. Voter departs

15. Illiterates and Persons with Disability can be assisted by relative within 4th degree, person of confidence (max. 3x) or BEI

16. No premature announcement of status of voting before close of polls

5) 12 Don'ts: Voting Rules



1. Votes together with another voter (except if illiterate/ PWD)
2. Speaks with anyone
3. Intentionally tears ballot
4. Uses means to copy ballot
5. Prepares ballot without using secrecy folder
6. Brings ballot outside Polling Place
7. Uses capturing devices inside Polling Place
8. Brings voting receipt outside Polling Place
9. Mingles with watchers
10. Exhibits ballot contents
11. Carries firearm
12. Conducts him/herself in disorderly behavior

5) AES Procedures



C. Closing of Polls: 5:00 p.m. up

1. If there are Voters within 30-meter radius, they will be allowed to vote (must fall in line, fill-up sheet and called)
2. BEI prints 8 copies of National Election Returns (NERs) and 8 copies of Local Election Returns (LERs)
3. VCM transmits results to:
 - a) Comelec
 - b) Transparency Server (KBP)
 - c) City/ Municipal Board of Canvassers (C/ M BoC)

5) AES Procedures



4. VCM prints 22 copies of NERs and 22 copies of LERs
5. BEI signs all ERs and affixes thumbmarks and places 8 NERs and 8 LERs inside Envelopes
6. Distribute all 30 NERs and 30 LERs (Next/ Higher Level of Canvassing, National and Local Political Parties, Media, Citizens' Arm, Ballot Box, Posted on Wall)
7. BEI shall post 1 copy of ER in a conspicuous place inside polling place

5) Distribution of ERs



Copy	Nationally-Elected	Locally-Elected
1	City/ Municipal BoC	City/ Municipal BoC
2	Congress (Senate President)	COMELEC
3	COMELEC	Provincial BoC
4	Citizens' Arm Quick Count	Citizens' Arm Quick Count
5	Dominant Majority Party	Dominant Majority Party
6	Dominant Minority Party	Dominant Minority Party
7	Ballot Box	Ballot Box
8	Provincial BoC	Posted on Wall
9 to 18	Major National Party	Major National Party
19 to 20	Major Local Party	Major Local Party
21 to 25	National Media	National Media
26 to 27	Local Media	Local Media
28 to 30	Other Citizens' Arm	Other Citizens' Arm



5) Not in 30

1. Align with any of 14 parties
2. Secure from Citizens' arm
3. Request from media
4. Take Photograph of ER posted on Wall
5. Get a copy at own expense (30 additional copies for ER)

5) AES Procedures



8. VCM prints Statistical and Audit Reports
9. Unused Ballots shall be disposed (torn lengthwise and placed in Envelopes)
10. BEI removes SD card (Slot A) and place inside Envelope (SD is Slot B not removed)
11. VCM shall be turned over to Logistics Provider or Election Officer
12. Deliver Ballot Box to the Local Treasurer

www.albertocagra.com

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THANK YOU. MORE POWER.