

Revision History

| Item No. | Release Date | Device | Country | Comm. Protocol |
|---|--------------|--------|---------|----------------|
| Commentary | | | | |
| <u>BB-CA1184</u> | 10/12/18 | BB300 | Canada | CCNET |
| <ol style="list-style-type: none"> 1. Processing of new polymer vertically oriented notes of 10 CAD (2018) has been introduced. 2. Acceptance rate for commemorative polymer 10 CAD (2017) has been improved. 3. Implemented workaround for potential recoverable bezel indication problem in Idling state. <p>Limitations:</p> <ol style="list-style-type: none"> 1. Jam/Power recovery is limited because of transparent windows on the banknotes. 2. Bill retraction functionality is limited. "Empty Dispenser" command must follow immediately after bill retraction (state "CA"). | | | | |
| <u>BB-CA1183</u> | 10/17/17 | BB300 | Canada | CCNET |
| <ol style="list-style-type: none"> 1. Acceptance rate for polymer banknotes has been improved by introducing a new bill processing algorithm. <p>Limitations:</p> <ol style="list-style-type: none"> 1. Jam/Power recovery is limited because of transparent windows on the banknotes. 2. Bill retraction functionality is limited. "Empty Dispenser" command must follow immediately after bill retraction (state "CA"). | | | | |
| <u>BB-CA1182</u> | 06/30/17 | BB300 | Canada | CCNET |
| <ol style="list-style-type: none"> 1. Processing of new commemorative polymer 10 CAD (2017) has been introduced. 2. Processing of 5, 10, 20, 50 and 100 CAD, issued before 2004, has been disabled. 3. Fixed CCNET command applicability after bills retraction. That prevents invalid/unexpected operations of the unit when the banknotes are inside of dispenser. <p>Limitations:</p> <ol style="list-style-type: none"> 1. Jam/Power recovery is limited because of transparent windows on the banknotes. 2. Bill retraction functionality is limited. "Empty Dispenser" command must follow immediately after bill retraction (state "CA"). | | | | |
| <u>BB-CA1180</u> | 07/24/15 | BB300 | Canada | CCNET |
| <ol style="list-style-type: none"> 1. Processing of creased polymer 5 CAD has been improved. 2. Overall acceptance rate has been improved. 3. Added jam recovery functions (in unloading and dispensing). 4. Infinite initialization cycle is fixed. Root cause found and resolved by putting a boundary check to prevent memory corruption during scanning. 5. Maintenance mode (cleaning card) support added. 6. Eliminated false bills rejection accompanied by "CHEATED" message. <p>Limitations:</p> <ol style="list-style-type: none"> 1. Jam/Power recovery is limited because of transparent windows on the banknotes. | | | | |
| <u>BB-CA1173</u> | 10/28/13 | BB300 | Canada | CCNET |

October 12, 2018

Processing of new 5 and 10 CAD to be issued in 2013 has been introduced.

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| <u>BB-CA1172</u> | 03/14/13 | BB300 | Canada | CCNET |
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1. Acceptance rate of polymer 20 CAD issued in 2012 has been improved based on the latest samples of street grade bills as well as bill samples from the second printing facility.
2. Acceptance rate of polymer 50 and 100 CAD have been improved based on the latest samples of street grade bills.

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| <u>BB-CA1171</u> | 11/13/12 | BB300 | Canada | CCNET |
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Processing of new 20 CAD issued in 2012 has been introduced.

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| <u>BB-CA1170</u> | 01/31/12 | BB300 | Canada | CCNET |
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1. Processing of new 100 CAD issued in 2011 and new 50 CAD to be issued in 2012 has been introduced.
2. BB statistics in new format has been introduced.
3. Processing of EMPTY DISPENSER command has been modified to prevent false credit report in non-applicable states.
4. During packing BB tries to reject a bill rather than reports one the following errors: A8, B5, C2 or E5. This modification allows to prevent jams inside BB switch.

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| <u>BB-CA1164</u> | 06/15/10 | BB300 | Canada | CCNET |
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1. Overall acceptance rate has been improved according to the latest samples of street money.
2. Barcode is prohibited to be stacked to the recycling cassette.
3. BB suspends dispensing and reports BOX REMOVED if drop box was removed over dispensing; BB will resume dispensing after drop box replacement.
4. Point of reporting "Waiting for bills to be removed" (0x1D 0x01) state during dispensing has been changed from the moment when BB starts moving the last bill to be dispensed from recycling cassette to dispenser to the moment when the last bill to be dispensed enters the dispenser.
5. Diagnostic has been introduced.
6. FEED LEVEL capability has been introduced.
7. Commands SET CASSETTE CAPACITY LIMIT and GET CASSETTE CAPACITY LIMIT have been added to CCNET.

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| <u>BB-CA1153</u> | 12/22/06 | BB300 | Canada | CCNET |
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1. Processing of new 5 & 50 CAD issued in 2006 has been introduced.
2. BB turns to IDLING through chassis re-initialization after the following sequence: Drop box removal, chassis removal, then chassis replacement and drop box replacement.
3. The keeping of correct BB statistics has been brought in (failure counters).
4. The improved algorithm of drop box initialization has been implemented in order to make sure that BB is always able to determine if drop box is completely attached.

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| <u>BB-CA1152</u> | 07/13/06 | BB300 | Canada | CCNET |
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1. Control of thermo heater in metal dispenser has been added.
2. Enhance the algorithm of BB self-testing: if cassette(s) is(are) removed, software has to skip the algorithm of "device recovery after POWER DOWN" and turn to the regular self-testing.
3. Set higher priority to the indication of "BOX REMOVED" state.

October 12, 2018

4. Make "RECYCLING CASSETTE STATUS" request accessible only in IDLING, DISABLED, ESCROW states (according to "CashCode NET" description).
5. Do not erase an IDENTIFICATION NUMBER of BB unit in statistics after download to the validating head the software designed for another country.
6. BB power recovery feature has been introduced.
7. Non-volatile counters for counting all dispensed or unloaded bills have been added.
8. Commands "POWER RECOVERY", "EMPTY DISPENSER", "EXTENDED CASSETTE STATUS" have been included to CCNET.
9. Size of the transparent window on the banknote has been brought in to be taken into account during transporting of the bill.
10. Errors related to setting date/time from B2B keypad in Service mode have been fixed.
11. The following error has been fixed: if remove a cassette from the chassis BB keeps trying to pack bills to that cassette.
12. "GET STATUS" command is enable only in IDLING and DISABLED states according to CCNET specification.
13. Error with displaying of "Not Assigned" state for recycling cassettes in Service mode has been fixed.
14. Prohibit switching to download mode in the following error states:
ERROR_LINK_SENS_HV, ERROR_MAGN_SENS_HV and ERROR_OPT_SENS_HV.
15. Prohibit performing software RESET in the following error states:
ERROR_LINK_SENS_HV, ERROR_MAGN_SENS_HV and ERROR_OPT_SENS_HV.
16. Add "READ BB-DEVICES SERIAL NUMBER" command to CCNET.
17. Remove the control of stand-by battery.
18. Fix for unload in case when some bills were manually removed from the cassette.

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| <u>BB-CA1149</u> | 08/11/05 | BB300 | Canada | CCNET |
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Distinctive features are:

1. Pass sensor's processing during bill packing has been improved to prevent rejection of single bills.
2. 'SET OPTIONS' and 'GET OPTIONS' commands have been added to CCNET.
3. Processing of the following options has been implemented:
'LED BV INHIBIT' -> 0 - LED is red in BV_INHIBIT state; 1 - LED is turned off
'KEEP BILL' -> 0 - bill will be dropped after returning; 1 - bill will be held
'LOOK TAPE' -> enhanced processing of pass sensor (0 - OFF, 1 - ON)
'TURN SWITCH' -> switch turning after bill packing (0 - OFF, 1 - ON)
5. Loss of cassette setting "Not Assigned" after RESET has been eliminated.
4. Control of triangle wheel in metal bezel during bill accepting has been improved to prevent the bill sticking.
6. Bill drop during rejecting or returning has been eliminated.
7. Processing of new 10 CAD issued in 2005 has been added.

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| <u>BB-CA1147</u> | 04/20/05 | BB300 | Canada | CCNET |
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First release for new hardware:

1. Metal bezel support.
2. Barcode recognition.
3. Jam (credit loss) prevention.
4. Chassis soft download via CCNET.
5. Improvement of short bill returning.
6. Bill drop prevention.