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Optipay™ BV

DBV-301 Bill Validator

This document contains information for installing and configuring the Optipay™ DBV-301 Bill Validator. It is designed to mount in a Vending Machine using the four (4) existing studs or a custom bracket provided within individual machine configuration kits. The DBV-301 contains the following features:

- \$1, \$5, \$10, and \$20 bill (banknote) acceptance
- Coupon Capable (Magnetic, Optical, Bar Code)
- One Magnetic and three multi-wave length sensors
- 4-Way bill acceptance
- High security
- Optional bill recycling capability (using the Optipay™ RC module)
- MDB (Multi Drop Bus)
- Color LED indicators for simple fault diagnostics
- Flash memory programming via Palm Pilot® or PC base station programming

PRIMARY OPTIPAY™ BV BILL VALIDATOR COMPONENTS

Figure 1 illustrates the primary component parts of a DBV-301 Bill Validator.

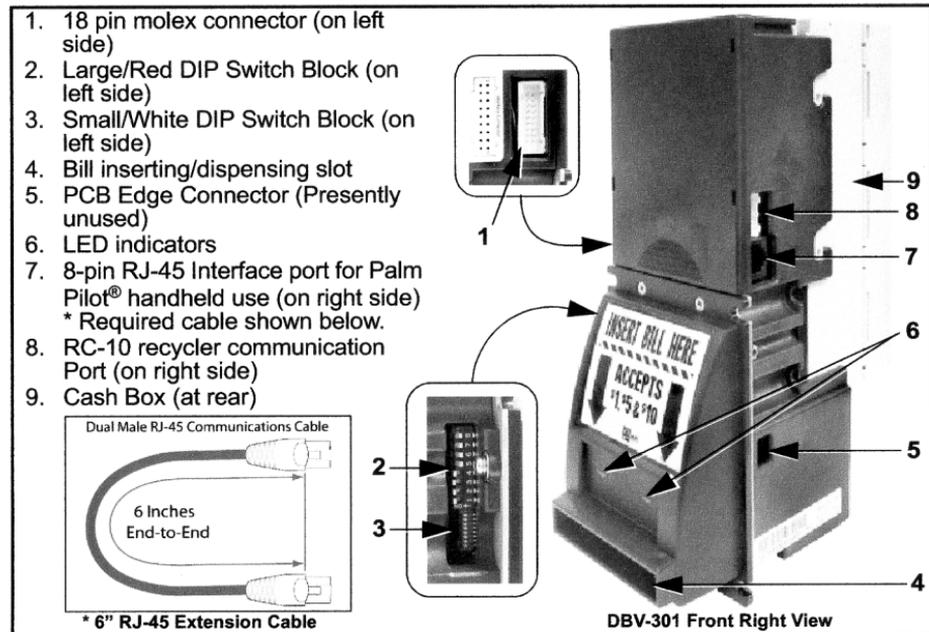


Figure 1 Primary DBV-301 Component Parts

MOUNTING INSTRUCTIONS



Caution: Turn the equipment power OFF before removing or replacing any components.

The DBV-301 must be mounted flush to the door surface without interference as illustrated in Figure 2a. Tighten the four mounting nuts in the order illustrated in the Figure 2b illustration.

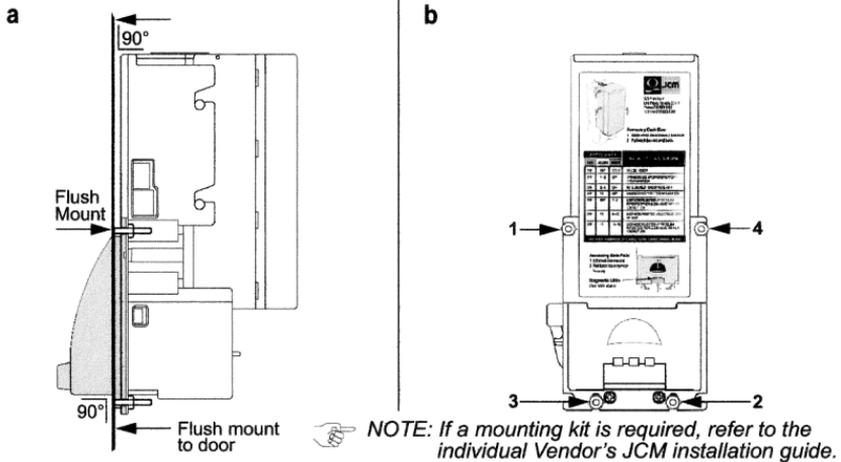


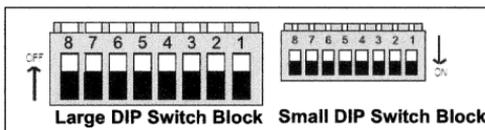
Figure 2 Mounting Considerations



Caution: Tighten mounting nuts until snug. DO NOT Over tighten.

DIP SWITCH SETTINGS

Figure 3 defines the DBV-301 DIP Switch settings.



Large/Red 8 position (upper) DIP Switch Block settings are:

- | | |
|----------------------|------------------|
| 1. OFF = accept \$1 | ON = Reject \$1 |
| 2. OFF = accept \$5 | ON = Reject \$5 |
| 3. OFF = accept \$10 | ON = Reject \$10 |
| 4. OFF = accept \$20 | ON = Reject \$20 |
| 5. Always = OFF | |
| 6. Always = OFF | |
| 7. Always = OFF | |
| 8. OFF = Normal | ON = Test Mode |

Small/White 8 position (lower) DIP Switch Block settings are:

- DIP Switches 1-7 Always = OFF
- DIP Switch 8 OFF = MDB I/F, DIP Switch 8 ON = Pulse I/F*

*See DBV-301 Operations Manual (Part No. 960-000103) for Pulse I/F settings.

Figure 3 Default DIP Switch Settings

REMOVAL/REPLACEMENT

CASH BOX

When the Recycler is not used, slide the white release tab located on top of the DBV-301 forward (See Figure 4) and pull the Cash Box up and out to remove it.

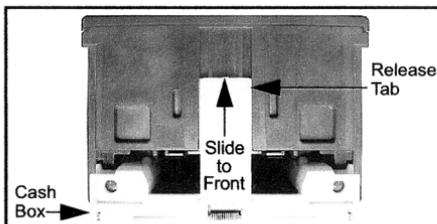


Figure 4 Cash Box Removal

SENSOR MODULE

To remove the Sensor Module, press up [1] on the release rod locking bar and pull the module outward [2] from the frame (See Figure 5).

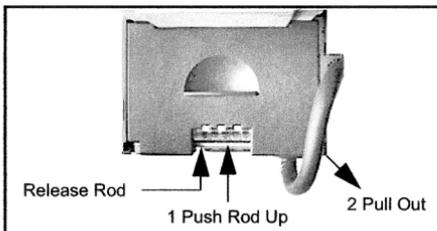
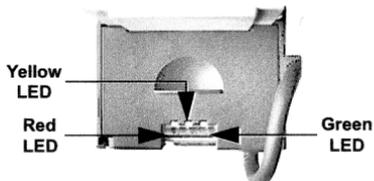


Figure 5 Sensor Module Removal

ERROR CODES

The Figure 6 Table lists the DBV-301 LED Error Code flash definitions.



Sensor Module Error Code Flash Indications

Number of Flashes			Diagnostic Description
Red	Yellow	Green	
OFF	OFF	SOLID	DBV / OK / READY
OFF	1	OFF	CASH BOX FULL / CHECK CASH BOX
2	OFF	OFF	STACKER ERROR / CHECK CASH BOX
OFF	3-4	OFF	NOTE JAMMED / CHECK NOTE PATH
OFF	10	OFF	CASH BOX POSITION / CHECK CASH BOX
OFF	OFF	1-8	LAST NOTE REJECTED / IF PROBLEM PERSISTS EITHER CLEAN NOTE PATH OR CONTACT JCM
OFF	OFF	9-10	LAST NOTE INHIBITED / REJECTED BY DBV OR HOST
OFF	OFF	11-15	LAST NOTE REJECTED / IF PROBLEM PERSISTS EITHER CLEAN NOTE PATH OR CONTACT JCM

Figure 6 DBV-301 Error Codes

OPTIPAY™ SYSTEM INTERCONNECTION

Figure 7 illustrates the proper connection of a DBV-301 to an A-66 and RC-10.

1. Recycler Cable from the A-66 Top Right Port
2. 4-Pin Recycler Plug (SAP-24568)
3. RC-10 Bill Recycler
4. DBV-301 Bill Validator
5. 6-Pin Connector to Vending Machine (5-Pins used)
6. Female 6-Pin Receptacle
7. MDB Cable Plug from the A-66 Top Left Port
8. MDB Connector Cable Assembly (Part No. 3210-05-03)
9. 18-Pin Header Plug (6-Pins Used)
10. A-66 Coin Changer

Note: The DBV-301 to RC-10 communications cable is not shown. Refer to Optipay™ RC Installation Guide Part №. 960-000107 for cabling illustration.

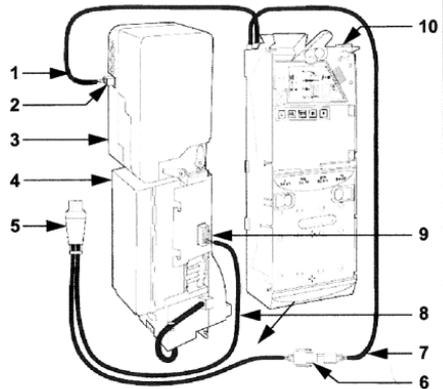


Figure 7 JCM Optipay™ System Equipment Interconnection

If additional information for interconnecting an A-66 to a DBV-301 and optional RC-10 Optipay™ family unit are required, refer to the Optipay™ System Interconnection Guide (Part No. 960-000114) to ensure a proper installation.

OPERATIONAL CHECK

Once the unit is installed, perform the following steps to ensure the DBV-301 is communicating with the MDB.

1. Power up the unit.
2. Wait for the LEDs on the front panel to stop flashing.
When the LEDs are solid the unit is in its operational mode.
3. Insert a bill and make sure the bill value inserted matches the value reading indicated on the machine's front panel illuminated icon displays.
4. Press the coin return lever to clear the machine's credit.

If further detailed instruction is necessary, refer to the primary DBV-301 Service Manual (Part No. 960-000103).

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CMS
12955 Enterprise Way
Bridgeton, Missouri 63044-1200

A Crane Co. Company

(800) 621-7278
www.CraneMS.com