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JCM TRAINING OVERVIEW

iVIZION® Banknote Acceptor

IACET Industry Certified

JCM TRAINING LABS

Quality Service Training

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iVIZION® Banknote Acceptor

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IVIZION-100 PARTS LIST

Part Number - Description

- 701-000148R Power Supply PS75-002
  or
- 701-100103R UAC WBA/UBA/iVIZION Kit

NOTE: The UAC Power Supply is only needed for older UAC Units. New orders will have a 5-24V 75W Power Supply provided with them (Part #G00260 included).

- USB Male 'A' to USB Mini-B Cable – Local Purchase by Customer
- 40i-000001R WBA/UBA to iVIZION Harness Cable Adapter for PS75-002 or UAC.

Thank You for choosing JCM products.

Lecture Notes

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SENTRY 2.0 BEZEL OPTION

The Sentry 2.0 Bezel is an exclusive optional enhancement for an iVIZION® Unit.

The Sentry 2.0 Bezel includes the following features:

1. High contrast, two-Color LCD Panel Display.
2. Easily customized and programmable capabilities.
3. Support for multiple languages.
4. Attendant Mode for easy issue resolution.
5. Last Banknote inserted visible on its Display
6. Handheld Remote Access Device
7. Three models available (See Figure 12).

SENTRY 2.0 CONFIGURATIONS

Figure 12 Sentry 2.0 Bezel Configurations Available

Lecture Notes

OVERVIEW

This training course addresses the following JCM iVIZION® device versions:

Table 1 Various iVIZION Versions

Device	Capacity/Contents
iVIZION 100 SS	64 Mbits standard (expandable to 192 Mbits)
iVIZION 100 SU*	64 Mbits standard (expandable to 192 Mbits)

* The SU Configuration is selected by a Jumper at the rear of the iVIZION Frame (pins 24 to 26). Refer to the iVIZION Service and Maintenance Manual for the SU Pin Connection configuration.

iVIZION UNIT

Figure 1 iVIZION Unit

Lecture Notes

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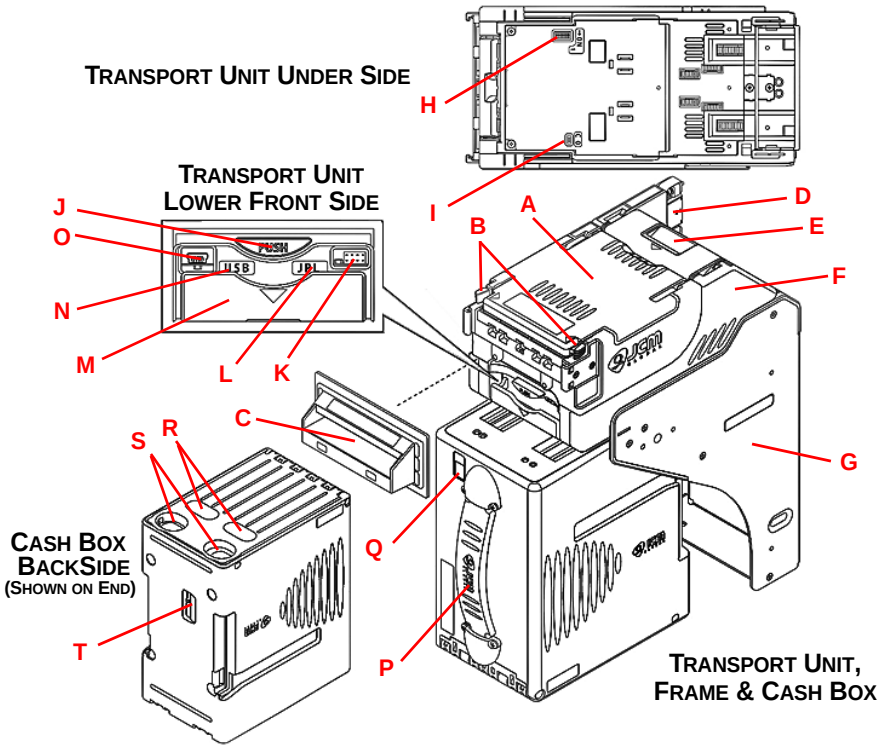
COMPONENT LOCATIONS

COMPONENTS



A. Acceptor Unit
B. Acceptor Front Upper Guide Access Lever
C. Sentry-2 Bezel (Option)
D. Interface Connector
E. Transport Rear Upper Guide Access Lever
F. Transport Unit
G. Frame Housing
H. DIP Switch Block (Denomination Inhibit)
I. DIP Switch Block (JCM Custom Private Line)
J. Acceptor Unit Release Push Button
K. Status LED (Four (4) Colors: Red/Yellow/Green & Blue)
L. Front Panel Optional Bezel Connector
M. Transport Unit Release Lever
N. Power ON LED (Green)
O. USB (Mini-B) Software Download/Calibration & Maintenance Connector
P. Cash Box
Q. Stack Volume Indicator
R. Cash Box Window (confirms the last stacked Banknote Denomination Value)
S. Lock Installation Holes Locks are user provided)
T. Pusher Lever - manually moves the Pusher Plate down (Activate to confirm Denom. Value in Cash Box Window "R").

Figure 2 iVIZION Component Locations

Lecture Notes

OPERATIONAL ERROR CODES

Operational Errors are associated with a malfunction within the iVIZION® Unit itself. Operational Errors are indicated by a RED LED flashing. By counting the flashes in-between the pause states, the Error can be determined and located in Table 9.

Table 9 Operational Malfunction LED Flash Error Codes

LED Color	Status LED		Causes and Solutions
	Flash No.	Error Types	
Red	1	Stacker Full	Detected a Stacker Full Condition. [Solution] Retrieve the Banknotes from the Cash Box. [Related Parts] Full Sensor: Validation CPU Board PL1, PT2, CN2 or Control CPU Board CN4.
	2	Communication Error between CPU Boards	Abnormal communication error between the Control CPU Board and the Validation CPU Board detected. [Solution] Ensure that all of the connectors on the Control CPU Board and the Validation CPU Board are properly connected.
	3	Sensor Adjustment Error	Abnormal Sensor adjustment detected on the Control CPU Board and the Validation CPU Board. [Solution] Perform a Sensor Adjustment of the Acceptor Unit.
	4	Speed Error	Abnormal Transport Speed Adjustment detected. [Solution] Ensure that no foreign objects are adhering to the Sensors. [Related Parts] FEED Motor: Interrupter Board CN1 or Control CPU Board CN1.
	5	E2P Error (No Sensor Adjustment)	The Acceptor Unit was replaced without performing a Sensor Adjustment. [Solution] Perform an Acceptor Unit Sensor Adjustment Procedure.
	6	Transport Error	Motor locked-up while transporting or stacking a Banknote. [Solution] Ensure that a foreign object and/or Banknote is not adhering to the Transport. [Related Parts] FEED Motor: Interrupter Board CN1 or Control CPU Board CN1.
	7	Reject Error	Motor Locked-up while rejecting a Banknote. [Solution] Ensure that a foreign object and/or Banknote is not adhering to the Transport. [Related Parts] FEED Motor: Interrupter Board CN1 or Control CPU Board CN1.
	8	Stacker Error (Pusher Plate Movement)	Motor locked-up while stacking (Pusher Plate movement) a Banknote. [Solution] Ensure that a foreign object and/or Banknote is not adhering to the Transport. [Related Parts] STACK Motor: Interrupter Board CN1 or Control CPU Board CN1.
	9	Pusher Plate Position Error	Did not detect the Position Sensor while moving the Pusher Plate. [Solution] Ensure that the Transport Unit and/or the Cash Box are properly Seated. Ensure that a foreign object and/or Banknote is not adhering to the Transport. [Related Parts] Home Position Sensor: HP Sensor Board LED, PT1, C1/High I/F Board CN5, CN1, CN3 or Control CPU Board CN3 STACK Motor: Interrupter Board CN1 or Control CPU Board CN1.
	10	No Cash Box	The Cash Box is not seated. [Solution] Ensure that the Cash Box is properly seated. [Related Parts] Box Sensor: Validation CPU Board PL4, PT3, PT4, CN2 or Control CPU Board CN4.
	11	No Acceptor Head	The Acceptor Unit's Access Cover is not locked in place. [Solution] Ensure that the Acceptor Unit's Access Cover is properly locked down.
	12	Anti-Strings Error	Fraud detected, [Solution] Ensure that no fraud fiber trail exists such as anti-string detected string.
	13	Reserved	Reserved
	14	Damaged Board	An Integrated Circuit (IC) is malfunctioning. [Solution] The Control CPU Board or the Validation CPU Board may be damaged. Replace the Circuit Boards if necessary.
	15	ROM/RAM Error	ROM or RAM is malfunctioning. [Solution] The Control CPU Board or the Validation CPU Board has performed abnormally. Replace the Circuit Boards if necessary.

Lecture Notes

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ICB CODE ERRORS

ICB Errors indicate a Set-up or Configuration issue exists with an Intelligent Cash Box (ICB). ICB errors are indicated by a flashing Blue LED. By counting the flashes in-between the pause states, the Error can be determined and located in Table 8.

Table 8 LED ICB Flash Error Codes

LED Color	Status LED		Causes and Solutions
	Flash No.	Error Types	
Blue	1	Reserved	Reserved
	2	ICB Seating Function Error	Proper seating of the Intelligent Cash Box (ICB) is malfunctioning. [Solution] The ICB Seating Function or the RF-ID Module may be damaged. Re-seat the ICB again or replace the following relative parts. [Related Parts] RFID Module: Validation CPU Board CN3, CN2 or Control CPU Board CN4.
	3	ICB Read/Write Error	ICB unable to communicate. [Solution] The ICB Seating Function or the RF-ID Module may be damaged. Re-seat the ICB again or replace the following relative parts. [Related Parts] RFID Module: Validation CPU Board CN3, CN2 or Control CPU Board CN4.
	4	ICB Data Error	ICB Data is malfunctioning. [Solution] The ICB Seating Function or the RF-ID Module may be damaged. Re-seat the ICB again or replace the following relative parts. [Related Parts] RFID Module: Validation CPU Board CN3, CN2 or Control CPU Board CN4.
	5	ICB Number Error	The Game Machine number is different. [Solution] The ICB Seating Function or the RF-ID Module may be damaged. Re-seat the ICB again or replace the following relative parts. [Related Parts] RFID Module: Validation CPU Board CN3, CN2 or Control CPU Board CN4.
	6	ICB Initialize Error	The ICB Seating Function or the RF-ID Module may be damaged. Re-seat the ICB again or replace the following relative parts. [Related Parts] RFID Module: Validation CPU Board CN3, CN2 or Control CPU Board CN4.
	7	Reserved	Reserved
	8	Reserved	Reserved
	9	Reserved	Reserved
	10	Reserved	Reserved
	11	Reserved	Reserved
	12	Reserved	Reserved
	13	Reserved	Reserved
	14	Reserved	Reserved
	15	Reserved	Reserved

Lecture Notes

SETTING COMMUNICATION STANDARDS

The following communication standards can be used with an iVIZION® Unit:

- **USB Interface** – USB 2.0 Standard
- **Serial Interface** – Photo-coupler Isolation
- **Serial Interface** – RS232 Communications
- **Serial Interface** – cc-Talk Communications.

SELECTING COMMUNICATIONS TYPES

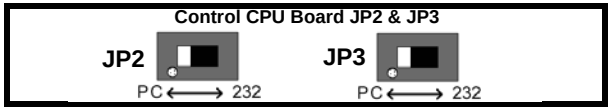
RS232 or Photo-coupler Serial Communications Selection

The communication DIP Switch Blocks required for making these selections are located on the Transport Unit under the Validator's Head.
To change these communications settings proceed as follows:

1. Remove the Validator Head from the Frame.
2. Remove the DIP Switch Block Cover from the Transport Unit.
3. Change the DIP Switches as required for selecting the related communication standard desired (See Table 2).

NOTE: When changing the type of iVIZION Serial Communications, Switches JP2 and JP3 located on the Control CPU Board must be set to identical switch positions.

Table 2 Serial Communications DIP Switch Settings



Switch No.	Marked	Non-Marked
JP2	Photo-Coupler Isolation (Standard)	RS232
JP3	Photo-Coupler Isolation (Standard)	RS232

NOTE: USB Interface and cc-Talk Standards are set by selecting and modifying the proper Pins on the iVIZION's External 26-Pin Communications Connector identified on Pages 8 through 12 of the iVIZION® Service and Maintenance Manual.

Lecture Notes

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CONNECTOR PIN DESIGNATIONS

Refer to the iVIZION® Service and Maintenance Manual to identify the Pin Designations assigned for the various communication Protocols supported via the iVIZION® Unit's 26-Pin External Signal Communications Connector.

Lecture Notes

LED REJECT ERRORS

Reject Errors indicate why a Banknote was not accepted. Reject Errors are represented by a flashing Green LED. By counting the flashes in-between the pause states, the Error can be determined and located in Table 7.

Table 7 LED Reject Error Codes

LED Color	Status LED		Causes and Solutions
	Flash No.	Error Types	
Green	1	Banknote Insertion Error	A Banknote is rejected due to a skewed detection position. [Solution] Ensure that a foreign object and/or Banknote is not adhering to the Acceptor Unit Sensors. Perform adjustment of the Acceptor Unit Sensors if necessary.
	2	UV Sensor Error	A Banknote is rejected by the UV Sensing process. [Solution] Ensure that a foreign object and/or Banknote is not adhering to the Acceptor Unit Sensors. Perform adjustment of the Acceptor Unit Sensors if necessary.
	3	Banknote remaining Error (Head Section)	A Banknote is rejected because a Banknote is detected within in the Acceptor Unit. [Solution] Ensure that a foreign object and/or Banknote is not adhering to the Acceptor Unit Sensors. Perform adjustment of the Acceptor Unit Sensors if necessary.
	4	Adjustment Error/ Diameter Error	A Banknote is rejected by the Validation Sensing process. [Solution] Ensure that a foreign object and/or Banknote is not adhering to the Acceptor Unit Sensors. Perform adjustment of the Acceptor Unit Sensors if necessary.
	5	Transport Time-Out Error	The Transportation timing is incorrect. [Solution] Ensure that a foreign object and/or Banknote is not adhering near the Transport Path Sensors.
	6	Denomination Error	A Banknote is rejected due to an incorrect denomination validation process. [Solution] Ensure that a foreign object and/or Banknote is not adhering to the Acceptor Unit Sensors. Perform adjustment of the Acceptor Unit Sensors if necessary.
	7	Photo Pattern Error 1	A Banknote is rejected by the Validation Pattern detection process. [Solution] Ensure that a foreign object and/or Banknote is not adhering to the Acceptor Unit Sensors. Perform adjustment of the Acceptor Unit Sensors if necessary.
	8	Photo Level Error	A Banknote is rejected by the Transmissive Level Validation detection process. [Solution] Ensure that a foreign object and/or Banknote is not adhering to the Acceptor Unit Sensors. Perform adjustment of the Acceptor Unit Sensors if necessary.
	9	INHIBIT Error	A Banknote is rejected by the INHIBIT Setting (e.g., a Banknote Acceptance Inhibit function). The Command for Escrow has not been sent. [Solution] Ensure the Host Machine or a iVIZION DIP Switch INHIBIT setting is not active.
	10	Reject Request	A Banknote was rejected by Host Machine request. [Solution] Ensure the INHIBIT setting of the Host Machine is correct.
	11	Ticket Error	Ticket Upside-down. [Solution] Ensure that the Ticket Barcode is facing up when inserted.
	12	Transport Overrun Error (Stacker Part)	A Banknote is rejected because a Banknote is detected within in the Acceptor Unit. [Solution] Ensure that a foreign object and/or Banknote is not adhering to the Transport Unit Sensors.
	13	Banknote Length Error	A Banknote is rejected because its length is longer than the acceptable length. [Solution] Ensure that the Banknote is a proper length
	14	Photo Pattern Error 2	A Banknote is rejected by the Validation Pattern detection process. [Solution] Ensure that a foreign object and/or Banknote is not adhering to the Acceptor Unit Sensors. Perform an adjustment of the Acceptor Unit Sensors if necessary.
	15	Authentic Banknote Identify Error	A Banknote is rejected by the authentic Banknote Validation detection process. [Solution] Ensure a foreign object and/or Banknote is not adhering to the Acceptor Unit Sensors. Perform adjustment of the Acceptor Unit Sensors if necessary.

Lecture Notes

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LED BILL JAM ERRORS

Bill Jam Errors indicate Bill movement issues through the iVIZION® Unit. Jam Errors are indicated by a flashing Yellow LED. By counting the flashes in-between the pause states, the Error can be determined and located in Table 6.

Table 6 LED Jam Error Codes

LED Color	Status LED		Causes and Solutions
	Flash No.	Error Type	
Yellow	1	Reserved	Reserved
	2	Entrance Sensor Jam	A Banknote jam occurred near the Entrance Sensor [Solution] Ensure that a foreign object and/or Banknote is not adhering to the Transport. [Related Parts] Entrance Sensor: Sensor Board LED1, PT1, CN1, or Validation CPU Board CN7.
	3	CIS Sensor Jam	A Banknote jam occurred near the CIS Sensor. [Solution] Ensure that a foreign object and/or Banknote is not adhering to the Transport. [Related Parts] CIS Sensor (Upper): Sensor Transfer Board CN4, CN1, CN2, Sensor Board CN2, CN3, CN1 or Validation CPU Board CN7. Lower CIS Sensor: Sensor Board CN5, CN1 or Validation CPU Board CN7.
	4	Exit Sensor Jam	A Banknote jam occurred near the Exit Sensor. [Solution] Ensure that a foreign object and/or Banknote is not adhering to the Transport. [Related Parts] Exit Sensor: Sensory Board LED2, PT1, CN1 or Validation CPU Board CN7.
	5	Feed-in Sensor Jam	A Banknote jam occurred near the Feed-in Sensor. [Solution] Ensure that a foreign object and/or Banknote is not adhering to the Transport. [Related Parts] Feed-in Sensor: High I/F Board LED1, PT1, CN3/ or Control CPU Board CN3.
	6	Feed-out Sensor Jam	A Banknote jam occurred near the Feed-out Sensor. [Solution] Ensure that a foreign object and/or Banknote is not adhering to the Transport. [Related Parts] Feed-out Sensor: Validation CPU Board PL3, PT1, CN2 or Control CPU Board CN4.
	7	Cash Box Inside Jam	A Banknote jam occurred at the Cash Box. [Solution] Ensure that a foreign object and/or Banknote is not adhering to the Transport.
	8 - 15	Reserved	Reserved

Lecture Notes

JCM REPAIR PROCESS FLOWCHART

This Training Guide follows the Standard JCM Repair Process for diagnosing and servicing an iVIZION® Unit. The following Flowchart provides a structured approach for maintenance of an iVIZION® Unit.

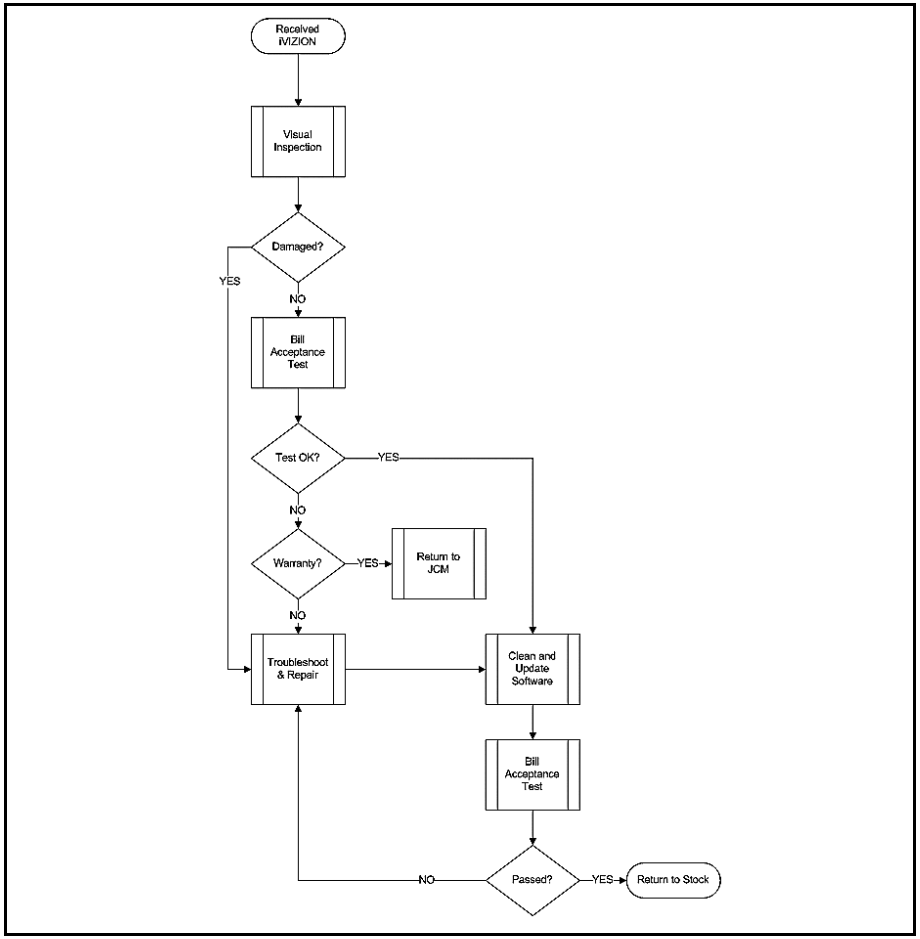

Figure 3 iVIZION Repair Process Flowchart

Lecture Notes

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JCM USB TOOL SUITE OVERVIEW

JCM Tool Suite Functions - UBA or iVIZION

Functions Available

The Service Mode Functions (See Figure 4 b & c) available on the JCM Tool Suite Device Information Page (See Figure 4 a) for a UBA® Unit include the following three types:

- Download
- Statistics
- Sensor Adjustment.

However, when an iVIZION® Unit is connected, the following functions are available in the Operations Mode:

- Download
- Statistics
- Utility with ICB Set-Up & Imaging (for iVIZION® Units only [See Figure 4 e]).
  If the iVIZION® Unit is connected to the JCM Tool Suite while in Maintenance Mode, the following additional functions will be available as well:
  - Sensor Adjustment (See Figure 4 d)
  - Performance Test (for iVIZION® Units only [See Figure 4 e]).

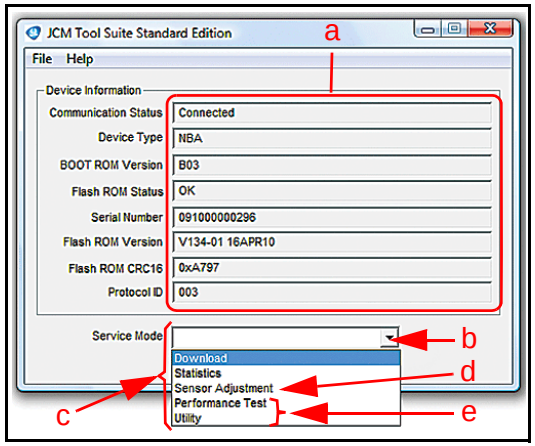

Figure 4 iVIZION Connected JCM Tool Suite Screen

For complete installation and operational instructions for loading the JCM Tool Suite Program onto your PC, refer to the JCM Tool Suite Installation Guide available at: http://www.jcmglobal.com.

Lecture Notes

ERROR TABLES

LED Operational Condition Indicators

The iVIZION® Unit's Multi-Color Front Panel LED always shows the current Operational Status of the iVIZION® Unit. Table 5 lists the various Color Code indications.

Table 5 LED Operational Code Conditions

Symptoms	Power ON LED	Status LED	Causes and Solutions
Normal Condition	Lit Green	Extinguished (Out)	The iVIZION is set-up correctly (Stand-by).
Initializing		Blue Flashes	The iVIZION is initializing.
Downloading		Lit Red Lit Green	The iVIZION is performing a download.
Near Full Detection		Lit Yellow	The iVIZION has detected a Nearly-full Cash Box Condition.
Test Mode		Lit Blue	The iVIZION status is in a "Performance Test Mode" (Stand-by).
Error		Red Flashes	The iVIZION has developed an error condition (See Table 8 LED Error Codes).
Banknote Jam		Yellow Flashes	The iVIZION has a jammed Banknote (See Table 6 Jam LED Flash Error Codes).
Reject		Green Flashes	The iVIZION has an error condition (See Table 7 LED Reject Error Codes).
The iVIZION is not working	Green LED Extinguished (Out)	Extinguished (Out)	Power is not being supplied. [Solution] • Ensure the Harnesses are connected to the Interfaces. • Ensure that the supply working Voltage and range is appropriate. • Ensure the Interface Harnesses are not disconnected between the Transport Unit and the Frame Unit. • Ensure that the higher Interface Board Fuse (F1) is not blown. • Ensure that all Harnesses and/or Circuit Board Connectors are properly seated onto the Control CPU Board.

Lecture Notes

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CALIBRATION

WHEN TO CALIBRATE

Sensors on the iVIZION® Unit are self-calibrating.
All calibrating is performed prior to shipment, or performed in a Depot Repair Facility only.

NOTE: If the Processor Board or any of the Sensors require replacement, the iVIZION® will require re-calibration at a Depot Repair Facility.

Lecture Notes

BANKNOTE ACCEPTANCE TESTS

ENTERING DIAGNOSTICS MODE

The Banknote (Bill) Acceptance Test is performed by completing the following steps:

1. Remove power from the iVIZION® Unit being tested.
2. Place the iVIZION® Unit in Diagnostic Mode.
3. Start the JCM Tool Suite Application.
4. Connect the iVIZION® Unit being tested to a PC USB Port (USB Male 'A' to Mini-B USB Cable).
5. Apply power to the iVIZION® Unit.
6. Select the Performance Test Mode.
7. Run the Accept Mode Test (Bill Acceptance). The screen shown in Figure 5 will appear.

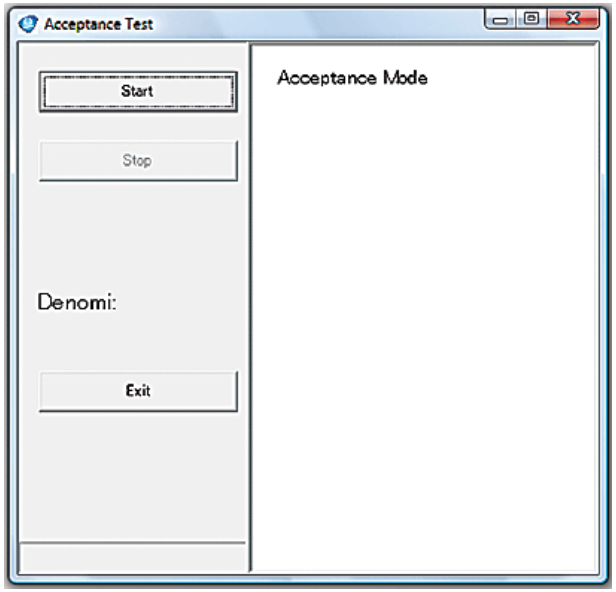

Figure 5 Typical Acceptance Test Screen

Lecture Notes

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DIAGNOSTIC MODE

If the Bill is Stacked, the Bill was accepted and the iVIZION® is operating properly.
However, If the "Bill Acceptance Test" indicated an error, proceed to the "Diagnostic" Testing Mode.
The Diagnostic Testing Mode is activated by turning DIP Switch No.8 to its "ON" position (See Figure 6 a).
The DIP Switch Block is located on the CPU Circuit Board found on the underside of the iVIZION® Transport Assembly.

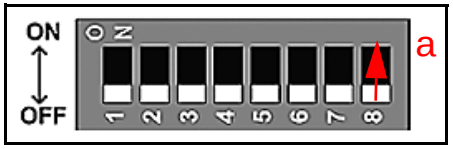

Figure 6 DIP Switch SW1

NOTE: If the "Bill Acceptance Test" was successful, proceed to the "Cleaning" and "Software Update" Modes.

If the "Bill Acceptance Test" indicates an error while in the "Diagnostic" Testing Mode refer to Table 3 to identify the error type being indicated.

Table 3 Acceptance Test Error Indications

Note Condition	LED Color	Error Condition
Banknote was Stacked	None	The Bill was accepted, and the iVIZION® is operating properly.
Banknote was not accepted	Green	The **GREEN** LED will blink a "Reject Code" set of flashes defined in the Reject Errors Table located in the iVIZION® Service Manual or in Table 7 of this Overview.
A mechanical failure occurred	Red	The **RED** LED will blink an "Operational Error Code" set of flashes defined in the Operational Errors Table located in the iVIZION® Service Manual or in Table 9 of this Overview.
A Bill jam occurred	Yellow	The **YELLOW** LED will blink a "Jam Error Code" set of flashes defined in the Bill Jam Error Table located in the iVIZION® Service Manual or in Table 6 of this Overview.
An Intelligent Cash Box (ICB) Error occured	Blue	The **BLUE** LED will blink an "ICB Error Code" set of flashes defined in the ICB Error Code Table located in the iVIZION® Service Manual or in Table 8 of this Overview.

Lecture Notes

SOFTWARE UPDATING

JCM TOOL SUITE APPLICATION

The JCM Tool Suite Application is used to update software on an iVIZION® Unit.
To Update Software in a iVIZION® Unit, proceed as follows:

1. Connect a USB Cable containing a Mini-USB Connector at one end to its mating receptacle located on the left front side of the iVIZION® Unit being updated.
2. Then connect the opposite end containing a Standard USB Connector to an open, unused USB Port on the PC containing the JCM Tool Suite Application.
3. Open the JCM Tool Suite Application.
4. Mouse-click on "Download" in the "Service Mode" Drop-down Menu. The Screen shown in Figure 11 will appear.

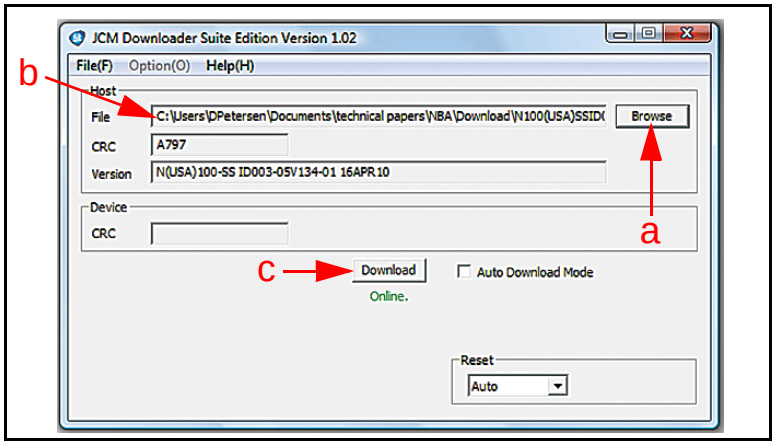

Figure 11 JCM Downloader Suite Edition Version 1.02 Screen

5. Use "Browse" (See Figure 11 a) to locate the download file desired. Mouse-click select the file to be downloaded so it appears in the "File" Field (See Figure 11 b); then Mouse-click on the "Download" Screen Button (See Figure 11 c).

Lecture Notes

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SENSOR IDENTIFICATION

Table 4 identifies the purpose of each Sensor located in Figure 10 on page 13 of this document.

Table 4 iVIZION Sensor Cleaning Location Types

Sym.	Sensor		Cleaning Method
a	Acceptor Unit	Entrance Sensors	Wipe area clean using a lint-free cloth such as a Micro-Fiber Cloth, or blow clean using Compressed Air.
b		Exit Sensors	
c		UV Sensor (Upper)	
d		UV Sensor (Lower)	
e		Transmissive Sensor	
f		CIS Sensor (Upper)	
g		CIS Sensor (Lower)	
h	Transport Unit	Feed-in Sensors	
i		Feed-out Sensors	
j		Home Position Sensor	
k		Home Position Sensor Lens	
l		Nearly Full Sensor	
m		Cash Box Sensor	
n	Cash Box	Home Position Sensor Lens	
o		Cash Box Sensor Lens	
p		Nearly Full Sensor Lens	
q	Anti-Stringing Mechanism		
r	Feed-in Sensor's Comb Grooves		

Lecture Notes

DIAGNOSTIC TESTING PROCEDURES

JCM TOOL SUITE STANDARD EDITION

Performance Testing

The JCM Tool Suite will be used to complete Functional and Sensor testing of an iVIZION® Unit. Figure 7 illustrates a typical connected iVIZION® JCM Tool Suite Screen with the "Service Mode" Pull-down Menu active. To begin a Performance Test Proceed as Follows:

1. Select **"Performance Test"** from the Drop-down Menu (See Figure 7 a). The **"Test Item select"** Screen shown in Figure 8 will appear.
2. From the **"Test Item select"** Screen, choose the iVIZION® Functional Test desired.

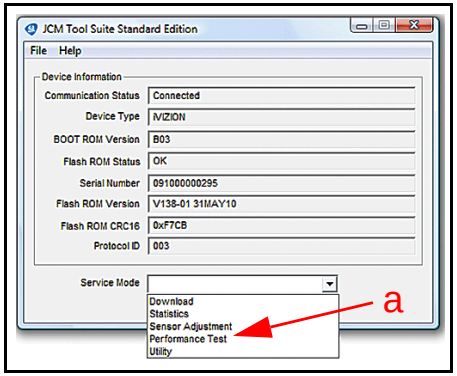

Figure 7 Typical Connected iVIZION JCM Tool Suite Screen

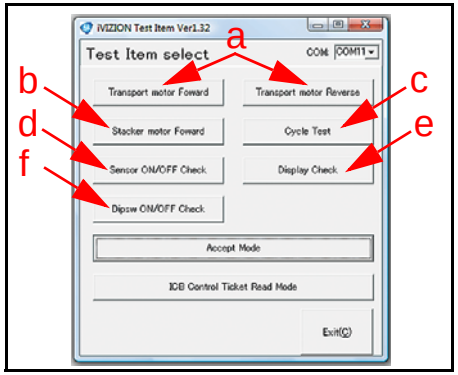

Figure 8 Typical iVIZION Test Item Select Screen

Lecture Notes

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AVAILABLE TESTS

Transport Motor Forward and Reverse Tests

These two (2) Tests runs the Transport Motor in a Forward or Reverse direction (See Figure 8 a).
Figure 9 illustrates the typical Motor Test Screen that appears when the "Transport motor Forward" Test Screen Button is selected.

- A **flashing** Yellow LED indicates a correct speed
- A **constantly lit** Yellow LED indicates an incorrect speed.

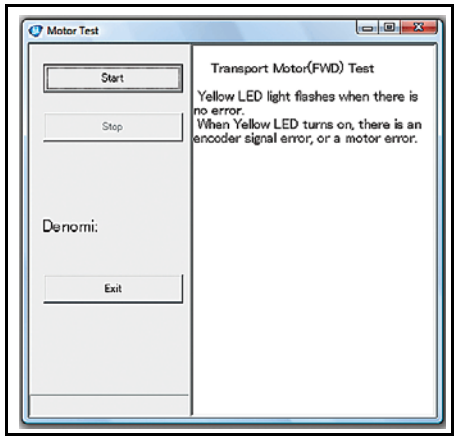

Figure 9 Typical iVIZION Transport Motor Test Screen

Stacker Motor Forward Test

This test cycles the Stacker Motor.

- A **flashing** Yellow LED indicates a correct Motor speed occurred (See Figure 8 b).
- A **constantly lit** Yellow LED indicates an incorrect Stacker Motor speed.

Cycle Test

This test performs a full Transport cycling of the iVIZION® Unit.

- Normal Operation is indicated when the Test LED remains **OFF** (See Figure 8 c).
- An error condition is indicated by a **flashing** Red LED. If this condition occurs, refer to the **Operational Errors Table** located in the iVIZION® Integration Guide to resolve the error.

Sensor ON/OFF Test

This test performs a functional test of the iVIZION® Unit's Sensors.

- Block each Sensor to test it. The Display with show "ON" or "OFF" indicating the functional status of the Sensor blocked (See Figure 8 d).

Display Check

This test cycles the LED Display on the right side of the iVIZION® Unit.

- The LEDs will continuously cycle through Red, Green & Blue Colors (See Figure 8 e).

DIP Switch ON/OFF Test

This tests the functional operation of each Switch on the 8-position DIP Switch Block located on the Transport Assembly.

- Block each Sensor to test it (See Figure 8 f).

Lecture Notes

CLEANING AND PREVENTATIVE MAINTENANCE

PREVENTATIVE MAINTENANCE

Proper cleaning is critical to maintaining a high Acceptance Rate on an iVIZION® Unit.
Clean all Sensors shown in Figure 10 using a dry lint free cloth ONLY.
The identity of each Sensor is listed in Table 4 on page 14 of this document.

NOTE: Do not use Alcohol, Solvents, Citrus Based Cleaners or Cleaning Cards on an iVIZION® Unit. Use of these compounds will damage the Unit's Lens Surfaces. DO NOT use JCM Cleaning Cards intended for use with the UBA or WBA Units either, the cleaning solution on them is not compatible with the iVIZION® Unit's Sensors.

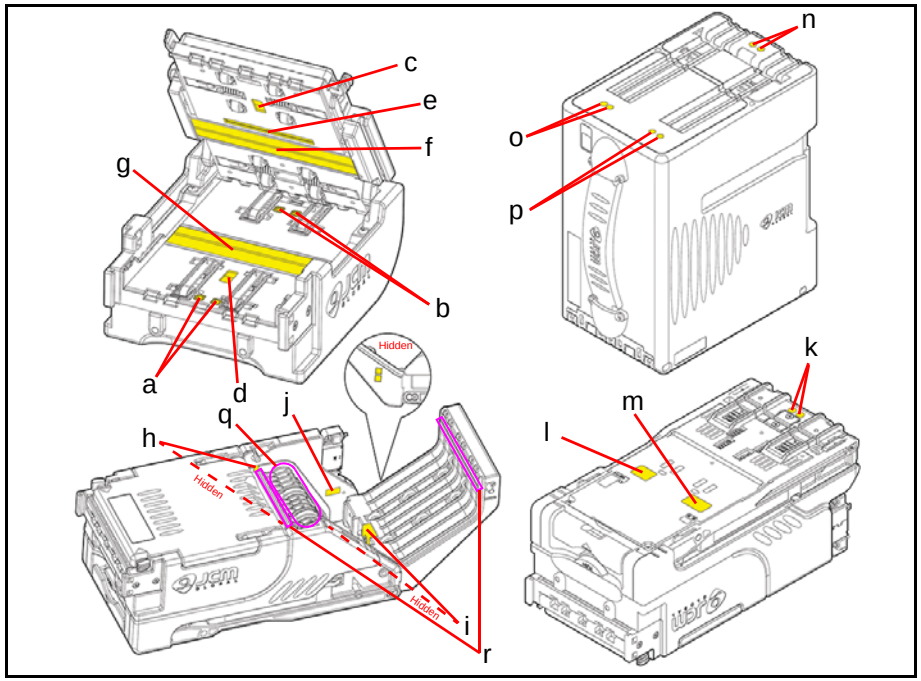

Figure 10 iVIZION Sensor Locations

Lecture Notes

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