

FlexPay™ IV 5.7 to 10.4-inch Display Upgrade Kit



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SECTION 1 - INTRODUCTION

Purpose

This manual provides instructions for upgrade of a dispenser door from a 5.7-inch display to a 10.4-inch display for a FlexPay™ IV CRIND®.

Intended Users

This manual is intended for Gilbarco®-trained and certified Authorized Service Contractors (ASCs).

Required Tools

- Phillips® Screwdriver
- Metric Socket Set
- Standard Socket Set
- Torx Driver (T15 or T20)

Configured Kits - Parts List

The 10.4-inch E-CIM™ kits are configured based on the customer requirements. Therefore, the parts list will vary for each configured kit. For additional part details, refer to the Bill of Materials (BOM) in the kit, your distributor, or contact Gilbarco Customer Service.

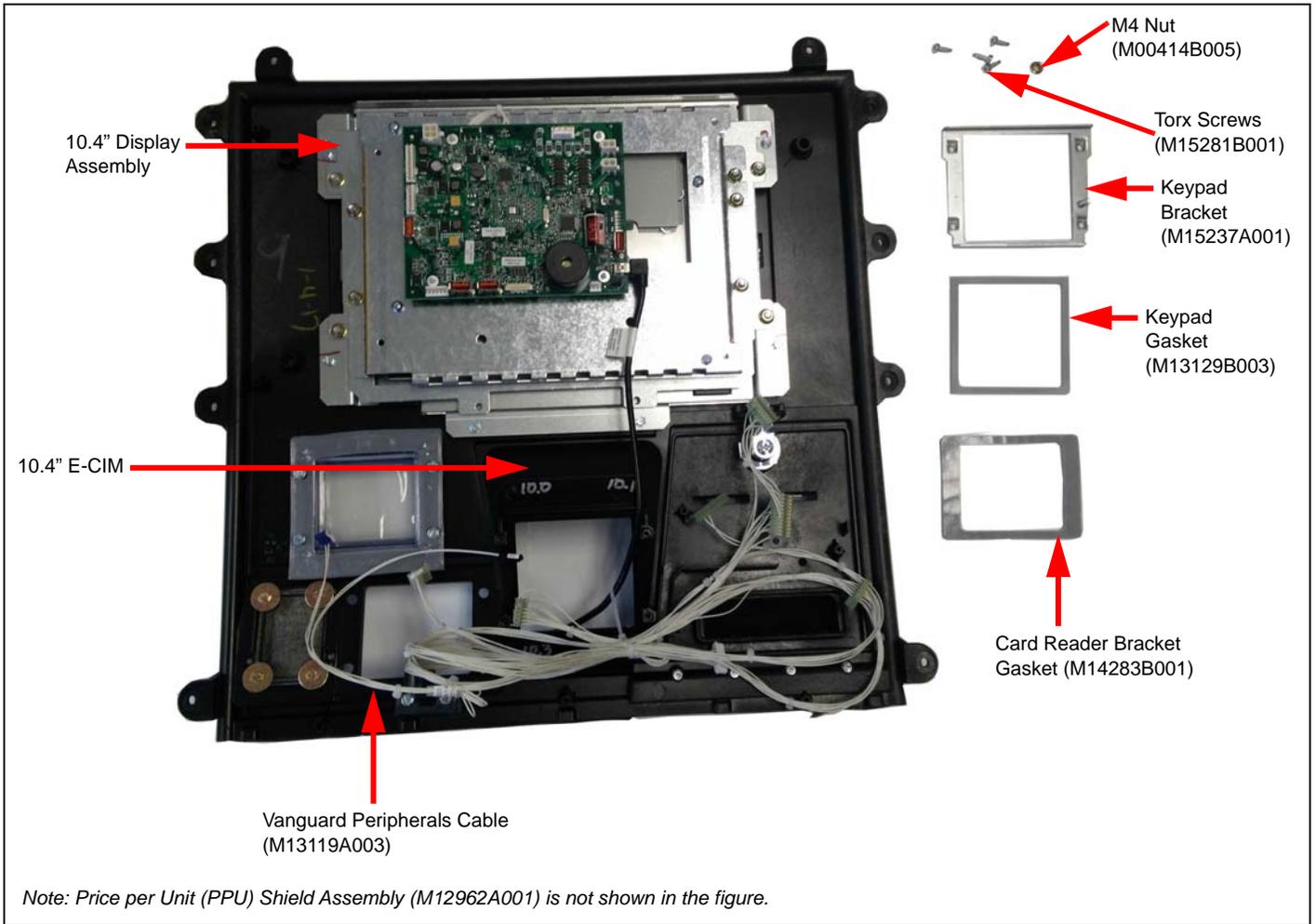
The following parts are included in a common 10.4-inch E-CIM Kit:

Location	Description	Part #	Quantity	Notes
Main Assembly	E-CIM insert for 10.4" Display	M14482A911/12	1	912- Americans with Disabilities Act (ADA), 911- Non ADA
Pre-mounted to E-CIM	10.4" Display Assembly	M14083A001	1	Includes display, Peripheral Interface PCB (PIP3), brackets, and cables
	10.4" Softkeys	M10206B001/B002	1 Each	B001 = Right, B002 = Left
	Nut, Metric, Flange, M5	M00414B001	4	Used for mounting Display Assembly on the E-CIM bracket.
	Vanguard Peripheral Cable	M13119A003	1	The M13119A002 cable designed for the 5.7-inch E-CIM will not be transferred over.
	ADA/Option Keypad	M12287B001	1	All US kits only
	Auxiliary/Option Keypad	M08430B002	1	Non U.S. Kits with auxiliary keypad option
	No Auxiliary Keypad - Blank	M08038A001	1	Non U.S. Kits without auxiliary keypad option
Loose Piece	E-CIM Horizontal Card Reader Bracket Gasket	M14283B001	1	New gasket is provided as existing gasket cannot be reused
	PPU Shield	M12962A001	1	Required for water sealing
	Bracket, UPM Keypad Mounting	M15237A001	1	Required as E-CIM door has flat bosses; old bracket will not clear dismounts.
	M3.5 Screw, Torx Head, 11"	M15281B001	4	Required to fix new bracket
	Gasket, Keypad	M13129B003	1	Required for water sealing
	Nut, Metric, Flange M4	M00414B005	1	Required to mount ground strap to new bracket

SECTION 1 - INTRODUCTION

Figure 1: 10.4-inch E-CIM Kit and 10.4-inch E-CIM Gasket, Horizontal Card Reader (M14283B001)

1



SECTION 2 - IMPORTANT SAFETY INFORMATION

Important Safety Information

Notes: 1) Save this Important Safety Information section in a readily accessible location.

2) Although DEF is non-flammable, Diesel is flammable. Therefore, for DEF cabinets that are attached to Diesel dispensers, follow all the notes in this section that pertain to flammable fuels.

This section introduces the hazards and safety precautions associated with installing, inspecting, maintaining or servicing this product. Before performing any task on this product, read this safety information and the applicable sections in this manual, where additional hazards and safety precautions for your task will be found. Fire, explosion, electrical shock or pressure release could occur and cause death or serious injury, if these safe service procedures are not followed.

Preliminary Precautions

You are working in a potentially dangerous environment of flammable fuels, vapors, and high voltage or pressures. Only trained or authorized individuals knowledgeable in the related procedures should install, inspect, maintain or service this equipment.

Emergency Total Electrical Shut-Off

The first and most important information you must know is how to stop all fuel flow to the pump/dispenser and island. Locate the switch or circuit breakers that shut off all power to all fueling equipment, dispensing devices, and Submerged Turbine Pumps (STPs).

⚠ WARNING	
	The EMERGENCY STOP, ALL STOP, and PUMP STOP buttons at the cashier's station WILL NOT shut off electrical power to the pump/dispenser. This means that even if you activate these stops, fuel may continue to flow uncontrolled.
	You must use the TOTAL ELECTRICAL SHUT-OFF in the case of an emergency and not the console's ALL STOP and PUMP STOP or similar keys.

Total Electrical Shut-Off Before Access

Any procedure that requires access to electrical components or the electronics of the dispenser requires total electrical shut off of that unit. Understand the function and location of this switch or circuit breaker before inspecting, installing, maintaining, or servicing Gilbarco equipment.

Evacuating, Barricading and Shutting Off

Any procedure that requires access to the pump/dispenser or STPs requires the following actions:



- An evacuation of all unauthorized persons and vehicles from the work area
- Use of safety tape, cones or barricades at the affected unit(s)
- A total electrical shut-off of the affected unit(s)

Read the Manual

Read, understand and follow this manual and any other labels or related materials supplied with this equipment. If you do not understand a procedure, call the Gilbarco Technical Assistance Center (TAC) at 1-800-743-7501. It is imperative to your safety and the safety of others to understand the procedures before beginning work.

Follow the Regulations

Applicable information is available in National Fire Protection Association (NFPA) 30A; *Code for Motor Fuel Dispensing Facilities and Repair Garages*, NFPA 70; *National Electrical Code (NEC)*, Occupational Safety and Health Administration (OSHA) regulations and federal, state, and local codes. All these regulations must be followed. Failure to install, inspect, maintain or service this equipment in accordance with these codes, regulations and standards may lead to legal citations with penalties or affect the safe use and operation of the equipment.

Replacement Parts

Use only genuine Gilbarco replacement parts and retrofit kits on your pump/dispenser. Using parts other than genuine Gilbarco replacement parts could create a safety hazard and violate local regulations.

Safety Symbols and Warning Words

This section provides important information about warning symbols and boxes.

Alert Symbol



This safety alert symbol is used in this manual and on warning labels to alert you to a precaution which must be followed to prevent potential personal safety hazards. Obey safety directives that follow this symbol to avoid possible injury or death.

Signal Words

These signal words used in this manual and on warning labels tell you the seriousness of particular safety hazards. The precautions below must be followed to prevent death, injury or damage to the equipment:



DANGER: Alerts you to a hazard or unsafe practice which will result in death or serious injury.



WARNING: Alerts you to a hazard or unsafe practice that could result in death or serious injury.



CAUTION with Alert symbol: Designates a hazard or unsafe practice which may result in minor injury.

CAUTION without Alert symbol: Designates a hazard or unsafe practice which may result in property or equipment damage.

Working With Fuels and Electrical Energy

Prevent Explosions and Fires

Fuels and their vapors will explode or burn, if ignited. Spilled or leaking fuels cause vapors. Even filling customer tanks will cause potentially dangerous vapors in the vicinity of the dispenser or island.

DEF is non-flammable. Therefore, explosion and fire safety warnings do not apply to DEF fluid lines.

SECTION 2 - IMPORTANT SAFETY INFORMATION

No Open Fire



Open flames from matches, lighters, welding torches or other sources can ignite fuels and their vapors.

No Sparks - No Smoking



Sparks from starting vehicles, starting or using power tools, burning cigarettes, cigars or pipes can also ignite fuels and their vapors. Static electricity, including an electrostatic charge on your body, can cause a spark sufficient to ignite fuel vapors. Every time you get out of a vehicle, touch the metal of your vehicle, to discharge any electrostatic charge before you approach the dispenser island.

Working Alone

It is highly recommended that someone who is capable of rendering first aid be present during servicing. Familiarize yourself with Cardiopulmonary Resuscitation (CPR) methods, if you work with or around high voltages. This information is available from the American Red Cross. Always advise the station personnel about where you will be working, and caution them not to activate power while you are working on the equipment. Use the OSHA Lockout/Tagout procedures. If you are not familiar with this requirement, refer to this information in the service manual and OSHA documentation.

Working With Electricity Safely

Ensure that you use safe and established practices in working with electrical devices. Poorly wired devices may cause a fire, explosion or electrical shock. Ensure that grounding connections are properly made. Take care that sealing devices and compounds are in place. Ensure that you do not pinch wires when replacing covers. Follow OSHA Lockout/Tagout requirements. Station employees and service contractors need to understand and comply with this program completely to ensure safety while the equipment is down.

Hazardous Materials

Some materials present inside electronic enclosures may present a health hazard if not handled correctly. Ensure that you clean hands after handling equipment. Do not place any equipment in the mouth.

WARNING

The pump/dispenser contains a chemical known to the State of California to cause cancer.

WARNING

The pump/dispenser contains a chemical known to the State of California to cause birth defects or other reproductive harm.

In an Emergency

Inform Emergency Personnel

Compile the following information and inform emergency personnel:

- Location of accident (for example, address, front/back of building, and so on)
- Nature of accident (for example, possible heart attack, run over by car, burns, and so on)
- Age of victim (for example, baby, teenager, middle-age, elderly)
- Whether or not victim has received first aid (for example, stopped bleeding by pressure, and so on)
- Whether or not a victim has vomited (for example, if swallowed or inhaled something, and so on).

WARNING



Gasoline/DEF ingested may cause unconsciousness and burns to internal organs. Do not induce vomiting. Keep airway open. Oxygen may be needed at scene. Seek medical advice immediately.

WARNING

DEF generates ammonia gas at higher temperatures. When opening enclosed panels, allow the unit to air out to avoid breathing vapors. If respiratory difficulties develop, move victim away from source of exposure and into fresh air. If symptoms persist, seek medical attention.

WARNING



Gasoline inhaled may cause unconsciousness and burns to lips, mouth and lungs. Keep airway open. Seek medical advice immediately.

WARNING



Gasoline/DEF spilled in eyes may cause burns to eye tissue. Irrigate eyes with water for approximately 15 minutes. Seek medical advice immediately.

WARNING



Gasoline/DEF spilled on skin may cause burns. Wash area thoroughly with clear water. Seek medical advice immediately.

WARNING

DEF is mildly corrosive. Avoid contact with eyes, skin, and clothing. Ensure that eyewash stations and safety showers are close to the work location. Seek medical advice/recommended treatment if DEF spills into eyes.

IMPORTANT: Oxygen may be needed at scene if gasoline has been ingested or inhaled. Seek medical advice immediately.

Lockout/Tagout

Lockout/Tagout covers servicing and maintenance of machines and equipment in which the unexpected energization or start-up of the machine(s) or equipment or release of stored energy could cause injury to employees or personnel. Lockout/Tagout applies to all mechanical, hydraulic, chemical, or other energy, but does not cover electrical hazards. Subpart S of 29 CFR Part 1910 - Electrical Hazards, 29 CFR Part 1910.333 contains specific Lockout/Tagout provision for electrical hazards.

SECTION 3 - REMOVING COMPONENTS

Before You Begin

CAUTION



A properly grounded Electrostatic Discharge (ESD) wrist strap must be worn while servicing any electronic devices or components. Failure to use electrostatic precautions may damage electronic components and void warranty.

3

To prepare the site and unit for the installation:

- 1 Perform an inventory of the parts list provided. Ensure that there is no damage to the parts and that all the parts are accounted for based on the BOM shipped with the kit. Ensure that you carry the recommended spare parts to the installation site.
- 2  Read and understand all the safety information found in *MDE-5221 FlexPay IV Start-up Manual* and “[Important Safety Information](#)” on [page 3](#). Perform a Job Safety Analysis (JSA) before beginning the installation.
- 3 Inform the manager.
- 4 Barricade the unit to be worked on.
- 5 Remove power to the unit at the breaker panel. Follow OSHA lockout/tagout procedures.

WARNING

Failure to turn off the unit during kit installation may cause injury or bodily harm from electrical shock. Ensure that all power to the unit is turned off before opening the door to the unit and during installation.

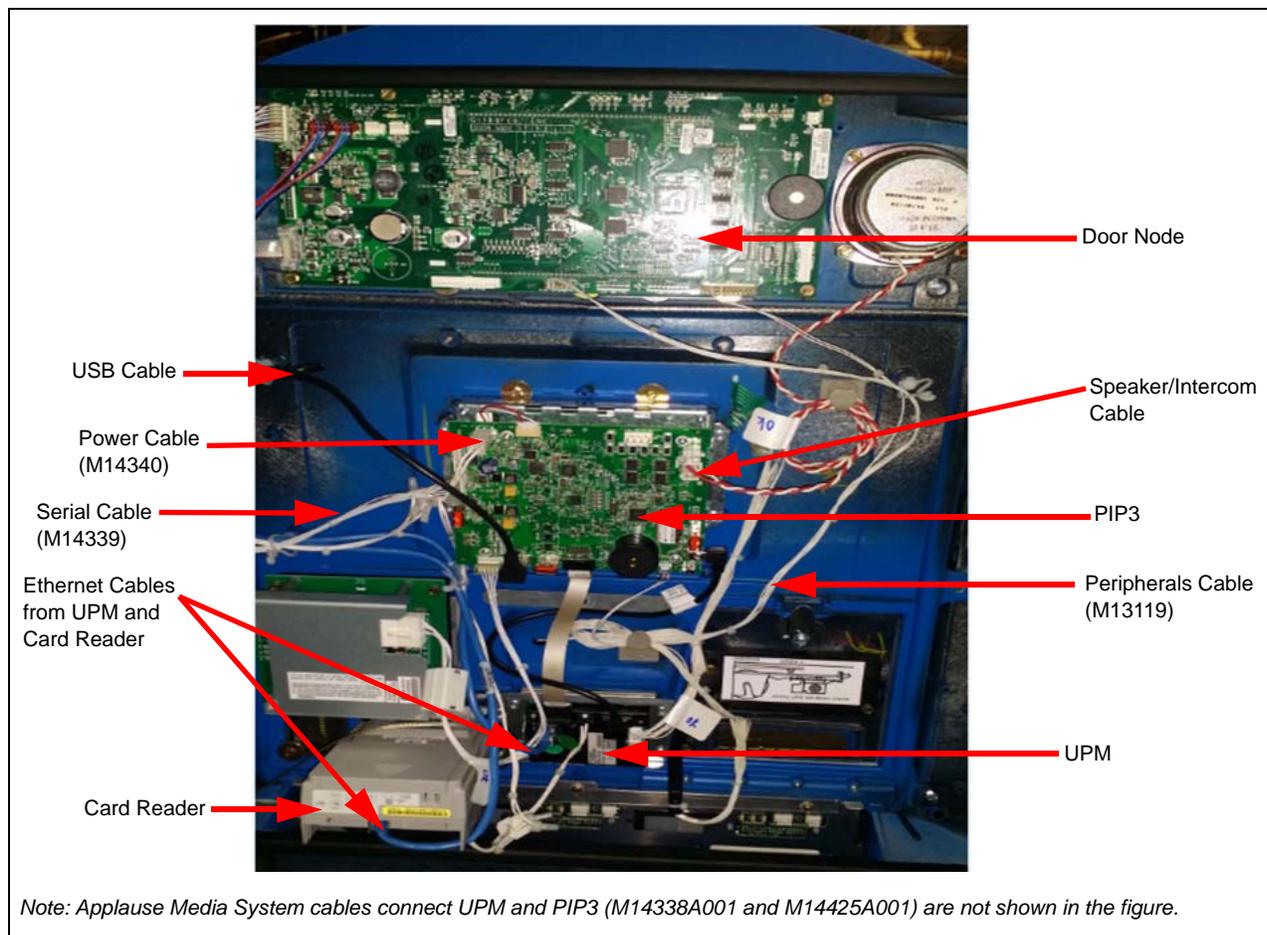
SECTION 3 - REMOVING COMPONENTS

5.7-inch E-CIM

To remove the 5.7-inch E-CIM from door:

- 1 Remove all cable connections from the electronics on the 5.7-inch display E-CIM door (see [Figure 1](#)). The following are the cable connections:
 - M14340 Power Cable from PIP3, Universal Payment Module (UPM), and card reader
 - M14339 Serial Cable from PIP3
 - M14338A001 and M14425A001 Applause™ Media System cables (if present) from UPM and PIP3
 - Speaker or intercom cable (if present) from PIP3
 - Universal Serial Bus (USB) cable to printer from PIP3
 - Ethernet® cables from UPM and card reader
 - M13119 Cable from door node

Figure 1: Removing Cable Connections from 5.7-inch E-CIM Door (M14478AXXX)



- 2 If TRIND® exists, remove it and its bracket from the door. Also, remove the R20773 Cable from the PIP3. It will be reinstalled in the new E-CIM.
- 3 Remove the grade select buttons by pushing down from the top of the soda button while pulling from bottom of the soda buttons. The grade select bases will remain in position.

Note: Be careful not to dislodge the magnets.

SECTION 3 - REMOVING COMPONENTS

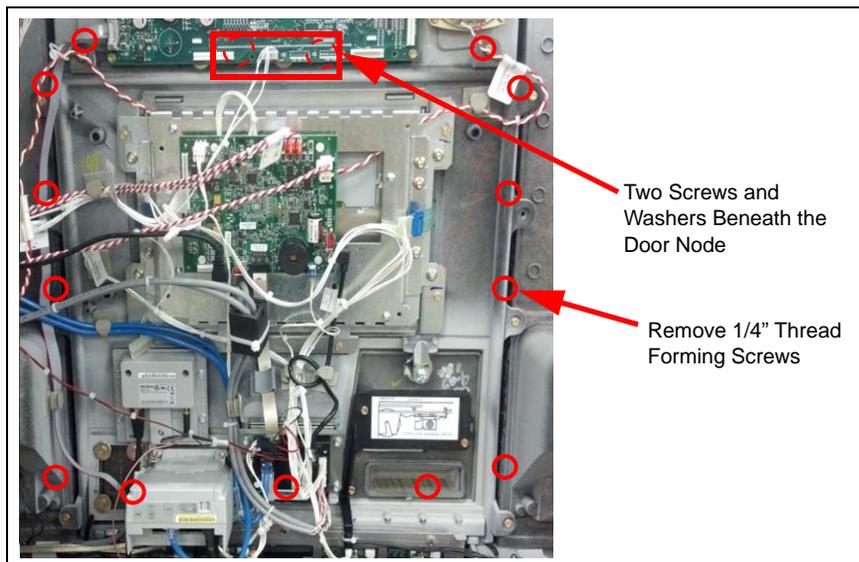
- 4 Remove the PPU graphic (including adhesive and white adhesive tape) to gain access to each of the five E-CIM mounting screws on the front of the main door.
Note: Ensure you have a graphic replacement.
- 5 Loosen and remove the five Phillips-head screws in the top row on the front of the unit (see [Figure 2](#)).
Note: Retain the screws for reinstallation.

Figure 2: Loosening and Removing E-CIM Mounting Screws



- 6 Remove the door node to access the two top-center, E-CIM mounting screws.
Note: If you are working on both doors, ensure not to swap the door nodes in further steps.
- 7 Remove all 1/4-inch thread forming screws connecting the E-CIM to the door, including the 1/4-inch thread forming screws that are also connected to the PPU bracket at the bottom of the E-CIM.
Note: Ensure that you remove the five screws beneath the PPU graphic first. You do not need to remove the PPU assembly, just the screws that attach it to the E-CIM.

Figure 3: Removing 1/4-inch Thread Forming Screws



- 8 Carefully remove the E-CIM from the door and place on a flat surface with the front facing down.

SECTION 3 - REMOVING COMPONENTS

ADA Cable Bracket

Remove the ADA cable bracket from the 5.7-inch E-CIM by cutting the cable tie and removing the three highlighted screws and then cutting the tie-wrap to the existing cable.

Note: Retain the cable bracket for reuse.

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Figure 4: Removing Screws from ADA Cable Bracket

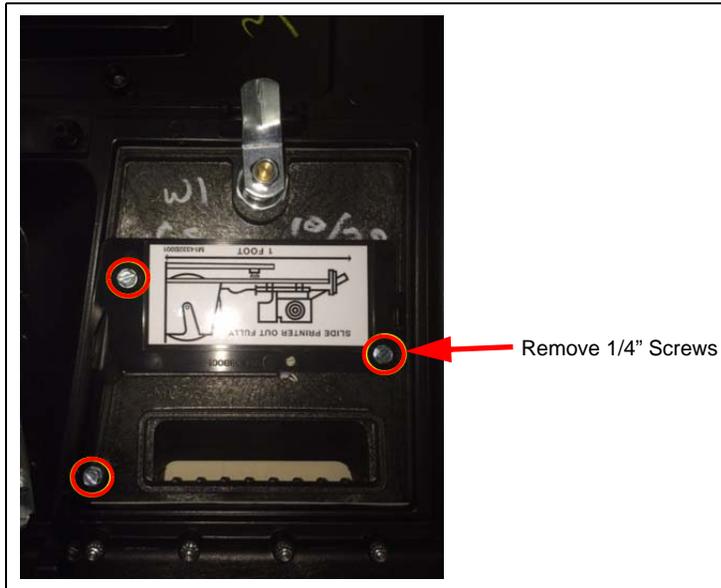


Figure 5: Removed Cable Bracket



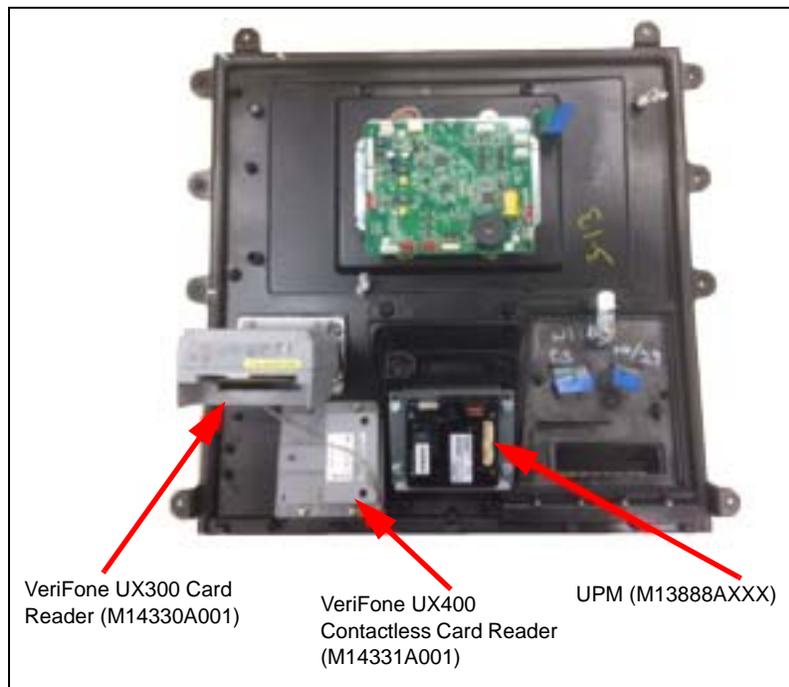
SECTION 3 - REMOVING COMPONENTS

Components

To remove the components:

- 1 Remove the M14346 Video Cable from UPM To PIP3, M13119 Cable from UPM, M14340A002 24 V Power Cable from UPM, card reader, and PIP3, USB cable from UPM to PIP3, and (if present) the coax and data cables from the card reader to the contactless card reader.
- 2 Remove the VeriFone® UX300 Card Reader (M14330A001) and the UPM (M13888AXXX) from the E-CIM door.
Note: Retain the components for reinstallation.
- 3 Remove card reader bracket from front of the E-CIM door. Remove all traces of gasket material from the bracket. A new gasket will be provided with the kit.
- 4 If present, remove the VeriFone UX400 Contactless Card Reader (M14331A001) or 2D Imager (M14055B001).

Figure 6: Removing Components



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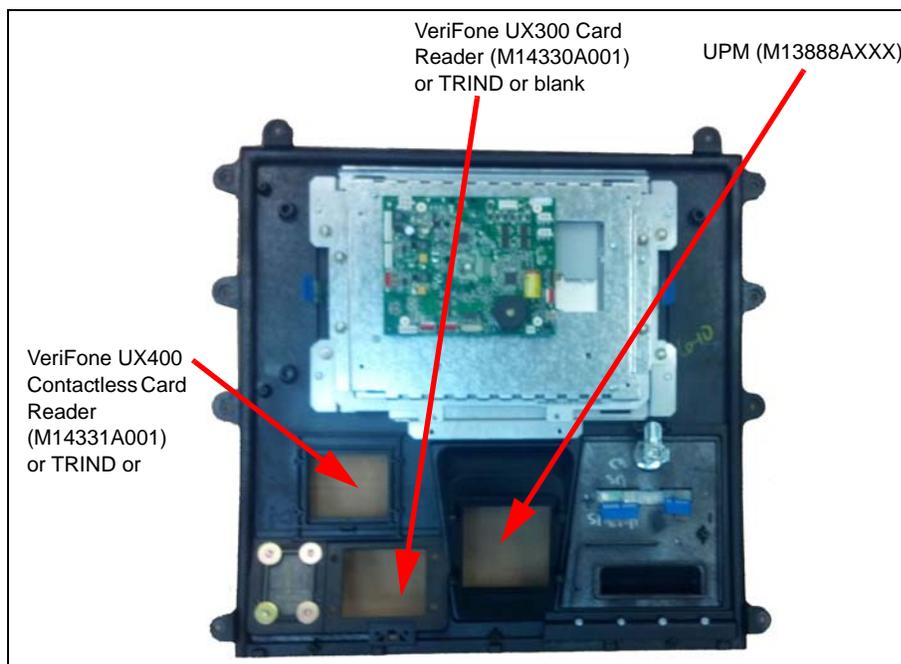
SECTION 4 - INSTALLATION

Components

- 1 Install the card reader bracket with a new gasket onto the front of the E-CIM.
- 2 Mount the VeriFone UX300 Card Reader (M14330A001) and the UPM (M13888AXXX) onto the 10.4-inch E-CIM door.
- 3 If present in the original door, mount the VeriFone UX400 Contactless Card Reader (M14331A001), TRIND Light and Inductor Assembly (M06143AXXX), or 2D Imager (M14055B001) onto the 10.4-inch E-CIM door.

4

Figure 1: Mounting Components



SECTION 4 - INSTALLATION

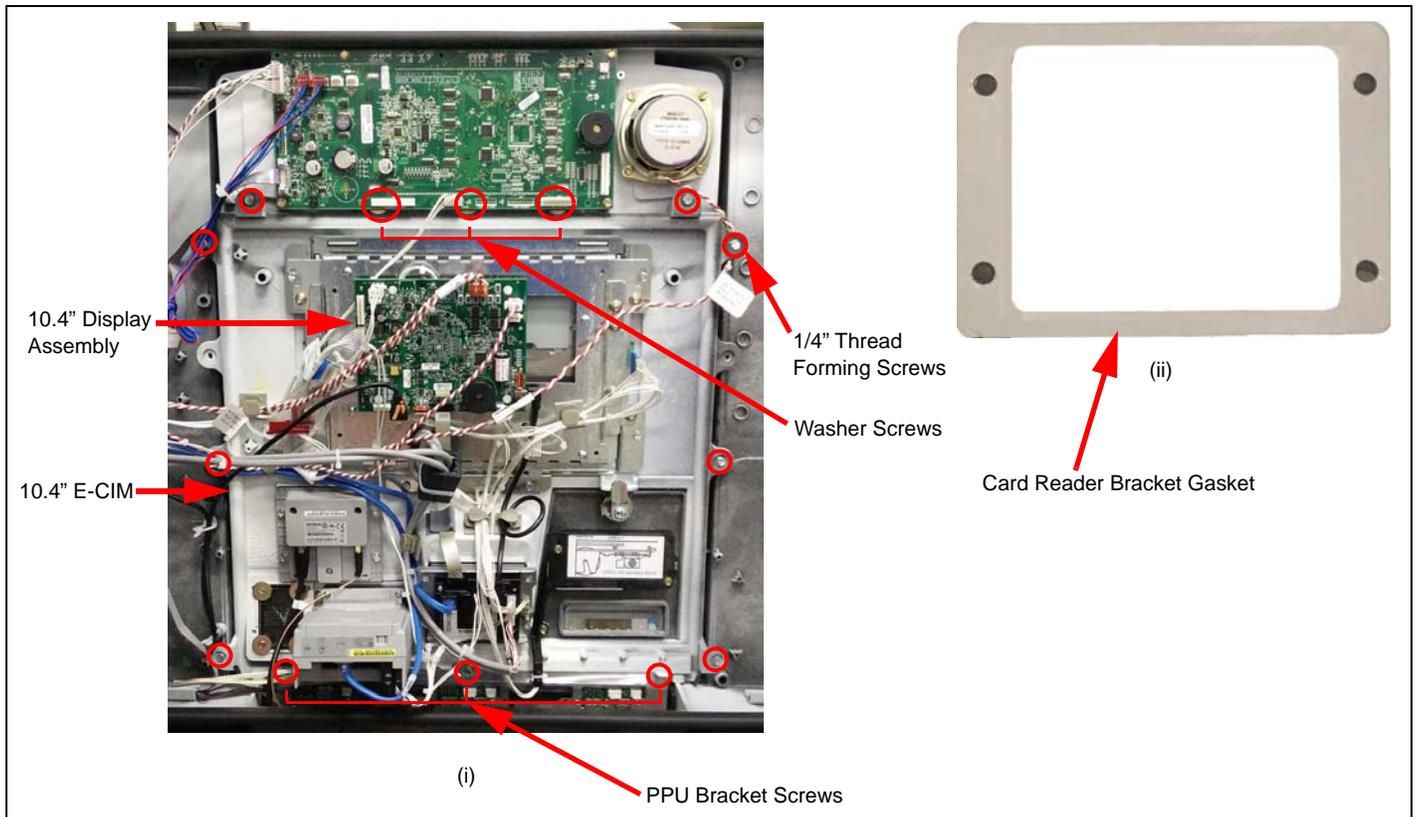
10.4-inch E-CIM

To install the E-CIM door:

- 1 Carefully mount the E-CIM on the door.

Note: Ensure that the E-CIM gasket seals properly against the door bezel.

Figure 2: Inserting 1/4-inch Thread Forming Screws



- 2 Insert all 1/4-inch thread forming screws to mount the E-CIM to the door removed in step 7 on page 7, including the 1/4-inch thread forming screws to connect the PPU bracket at the bottom of the E-CIM.

SECTION 4 - INSTALLATION

3 Insert and tighten the five Phillips-head screws in the top row on the front of the unit.

Figure 3: E-CIM Mounting Screws



4

4 Install the PPU graphic (including adhesive and white adhesive tape).

5 Install the grade select buttons.

6 Remount the door node.

Note: If you are working on both doors, ensure not to swap the door nodes in further steps.

7 Ensure that all the cables that were detached during disassembly are reconnected. To make the cable connections, proceed to “Cables”.

Cables

To connect the cables:

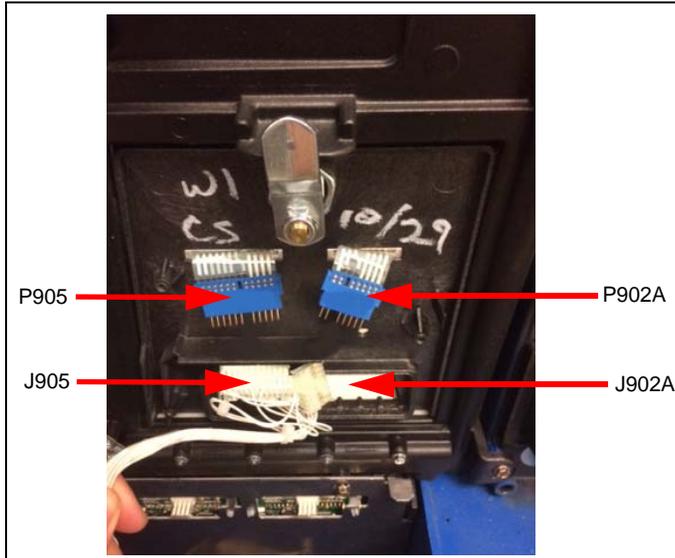
- 1 Connect all cable connections from the electronics on the 10.4-inch display E-CIM door. The following are the cable connections:
 - M14340 Power Cable to PIP3, UPM, and card reader
 - M14339 Serial Cable from PIP3
 - M14338A001 and M14425A001 Applause Media System Cables (if present) from UPM and PIP3
 - Speaker or intercom cable (if present) from PIP3
 - USB cable from printer
 - Ethernet cables from UPM and card reader
 - M13119 Cable from door node

SECTION 4 - INSTALLATION

- 2 Connect the M13119A003 Cable to the left, right, and ADA softkey, PIP3, and then (after installing the E-CIM) to the door node, and J192 for the door switch.

Note: The M13119A003 Cable for the new E-CIM is the 10.4-inch display version and it will be included in the kit. The M13119A002 cable designed for the 5.7-inch E-CIM will not be transferred over to the new configuration.

Figure 4: Connecting Vanguard Peripherals Cable



- 3 Connect M14346 Video Cable from UPM to display assembly.
- 4 Connect M14340A002 Power Cable to UPM, card reader, and PIP3.
- 5 Connect USB cable from UPM to PIP3.
- 6 Mount the ADA cable bracket to the door and tie-wrap the cable to the bracket:
- 7 If present, in the original door, connect the cables from the VeriFone UX400 Contactless Card Reader [M14331A001 (to card reader)], TRIND Light and Inductor Assembly [M06143AXXX (to PIP3)], or 2D Imager [M14055B001 (to PIP3)] onto the 10.4-inch E-CIM door.
- 8 If present, connect the M14338 Applause Media System Video and M14425 Applause Media System Audio Cables to the UPM and PIP3.
- 9 Connect the M14339A001 Cable to the PIP3.

TRIND

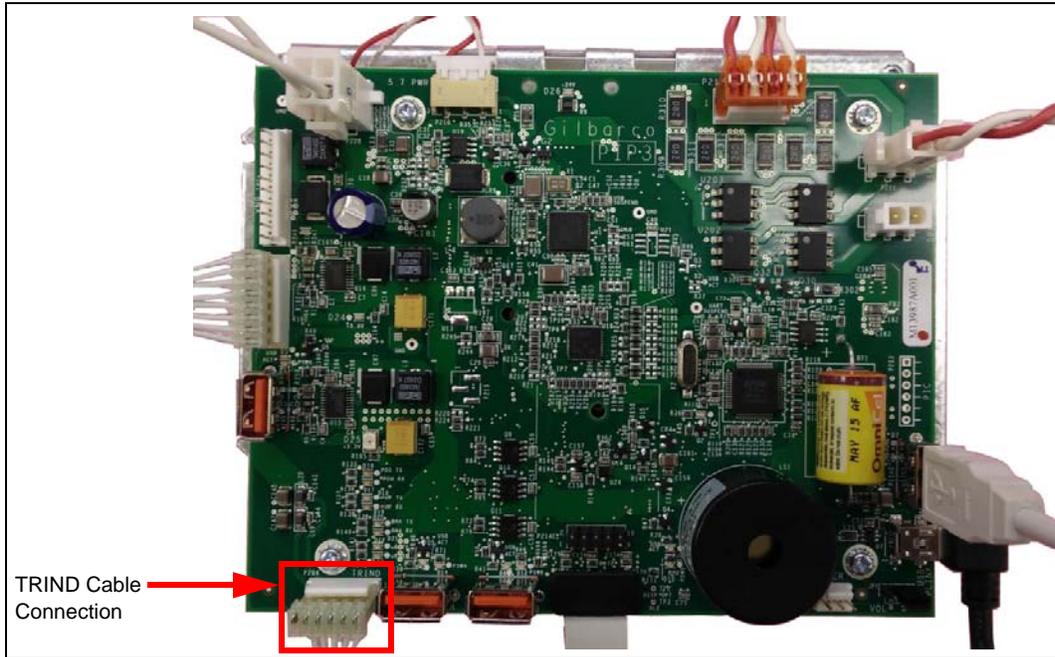
If TRIND was previously installed, follow these steps to reinstall the TRIND:

- 1 Remove the TRIND Light Indicator Assembly (M06143A00X) and bracket from the old E-CIM door.
- 2 Reattach the TRIND light indicator assembly and bracket to the new E-CIM door provided in the kit.

SECTION 4 - INSTALLATION

3 Connect the PIP3 using the TRIND Cable (R20773). Connect the J204 to P204.

Figure 5: Connecting TRIND Cable



4

Completing Installation

To complete the installation:

- 1 Inspect all the connections and cable routing before applying power.

IMPORTANT INFORMATION

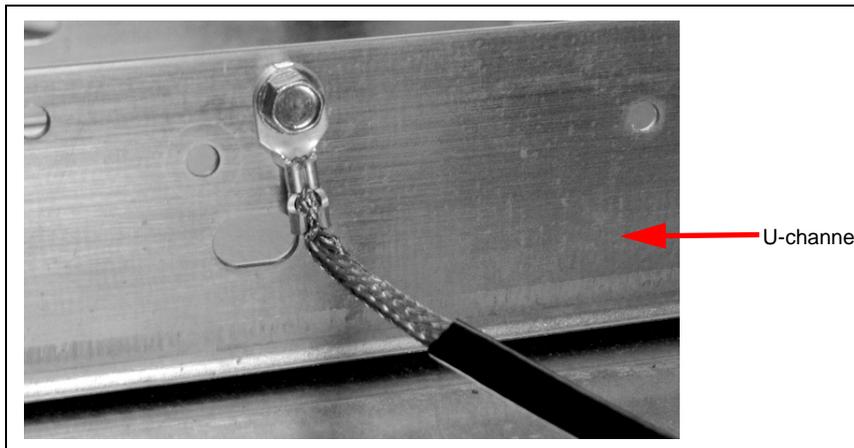


Cable routing is critical. It is very important to route and dress the cables properly. Exercise care in routing the cables, keeping in mind that the door(s) opens and closes for service. The cables must be dressed neatly. Ensure that there is no interference after the cables are connected and routed. ESD ground straps can be bundled together, but need to be separated from data and power cables. They should be fastened to the U-channel with separate bolts (see [Figure 6](#) on [page 16](#)).

After making all cable connections, close the main door and open the printer door. Pull the sliding printer tray and ensure that there is no cable interference.

SECTION 4 - INSTALLATION

Figure 6: Ground Wire Connected to Chassis



4

Additionally, if the unit has contactless, ensure that no cables route within two-inch of the contactless antenna.

- 2 Clean up the work site, removing all materials to be discarded and all tools.
- 3 Power on the unit at the breaker panel and reactivate the unit.
- 4 Observe the display after powering on. Ensure that the display is readable.
Note: During system recommissioning, CRIND Basic Input/Output System (BIOS) will need to be set to "Factory Reset = Enabled" to force the software to redraw the screens to match the new display size.
- 5 Put the unit back into service.
- 6 Restart the unit and enter all the CRIND settings.

For more information, refer to *MDE-5221 FlexPay IV Start-up Manual*.

Installing the 10.4-inch display for a FlexPay IV CRIND is now complete.

SECTION 5 - REFERENCE INFORMATION

Related Documents

Document No.	Title
MDE-5221	FlexPay IV CRIND Start-up Manual

Abbreviations and Acronyms

Term	Description
ADA	Americans with Disabilities Act
AFP	Auxiliary Feature PCB
ASC	Authorized Service Contractor
BIOS	Basic Input/Output System
BOM	Bill of Materials
BNA	Bank Note Acceptor
CRIND	Card Reader in Dispenser
E-CIM	Enhanced Customer Interface Module
ESD	Electrostatic Discharge
GSoM	Gilbarco Systems on Module
I/O	Input/Output
JSA	Job Safety Analysis
LAN	Local Area Network
MTA	Mass Terminal Assembly
OSHA	Occupational Safety and Health Administration
PCB	Printed Circuit Board
PIP	Peripheral Interface PCB
PPU	Price Per Unit
TRIND	Transmitter/Receiver in Dispenser
UPM	Universal Payment Module
USB	Universal Serial Bus
VDC	Voltage Direct Current

SECTION 5 - REFERENCE INFORMATION

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SECTION 6 - APPENDICES

Appendix A: Peripheral Options

PIP3 Board Connections

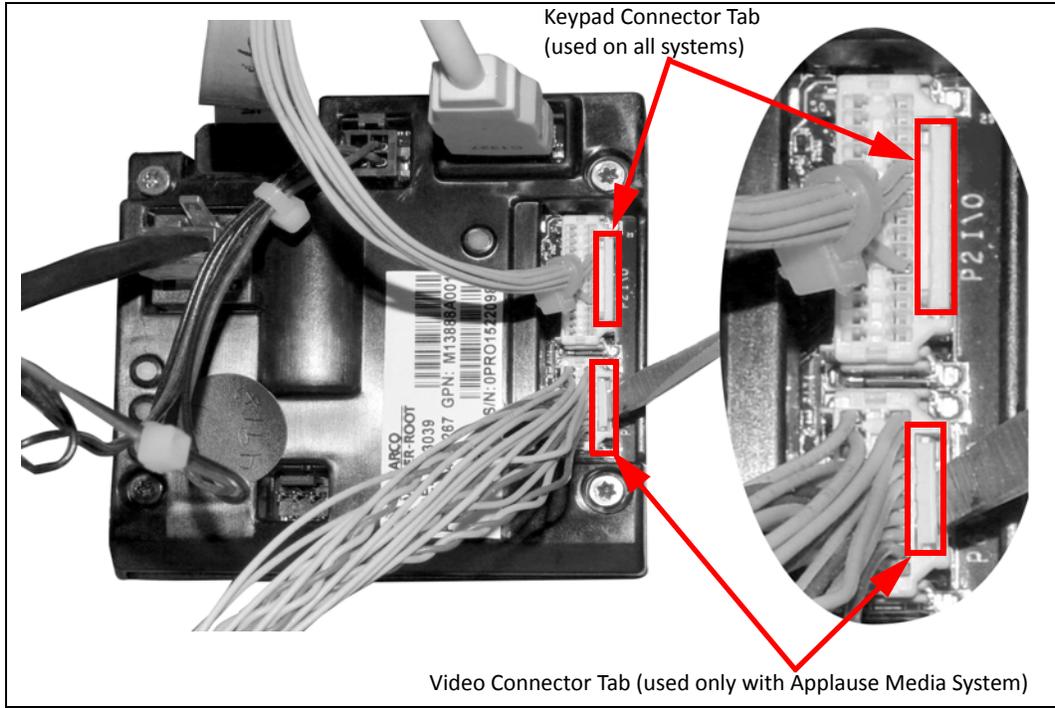
The following table lists the connections on the PIP3:

Connector	Port Number	Function	From	To
8-pin Mass Terminal Assembly (MTA)	P202A	RS-232 Pump and CRIND data from Auxiliary Feature PCB (AFP)	P202A	P302A/B
10-pin MTA	P201	Cash Acceptor	P201	Bank Note Acceptor (BNA)
6-pin MTA	P204	TRIND	P204	TRIND J182
3-pin Plug	P213	BEEP Connector	P213	UPM P2
4-pin Plug	P220	24 VDC IN	P220	Power Supply Cable (M14340)
Mini USB	USB UPLINK	USB IN	USB UPLINK	UPM P4
USB	P214A	USB IN	P214A	USB Expand
USB	P214B	USB Out	P214B	USB Expand
USB	P214C	USB Out	P214C	USB Expand
USB	P214D	USB Out	P214D	USB Expand
USB	P214E	SS Flash Drive (optional)	P214E	SS Flash Drive
4-pin MTA	P219	Speaker Input from AFP	P219	Gilbarco Systems on Module (GSoM) P219 L and R
2-pin Mat-n-Lok	P211	Audio to Left Speaker	P211	Left Speaker
2-pin Mat-n-Lok	P212	Audio to Right Speaker	P212	Right Speaker
25-pin	P205	Video Input from UPM	P205	UPM P5
20-pin	P206	LVDS Data to 10.4"	P206	10.4"
33-pin	P207	Video Data to 5.7"	P207	5.7"
2-pin	P215	Up/Down for 5.7"	P215	DNP
3-pin	JP1	Drive for Beeper		Jump Jack
10-pin	P208	10.4" Backlight	P208	10.4" Backlight
3-pin	P210	5.7" Backlight	P210	5.7" Backlight Leads

SECTION 6 - APPENDICES

UPM Board Connections

Figure 1: UPM Board Connections



The following table lists the connections on the UPM:

Port Number	To	Function
P1	24 V Power into UPM	UPM power (and keypad heater power, if equipped)
P2	PIP3 - (P213), softkeys, door node (P2111), door switch (192), ADA, call	Input/Output (I/O) to multiple CRIND functions: <ul style="list-style-type: none"> • Softkeys • ADA • Door switch • Beeper
P3	AFP - Side A or B J303B/J305A, J305B, or J305C	Ethernet to the AFP board
P4	PIP3 - USB uplink	USB uplink to the PIP3
P5	PIP3 - P205	Video out
P6	GSoM - P406 Applause Media System video input	Video input from the GSoM

The following table lists the peripherals for the cables:

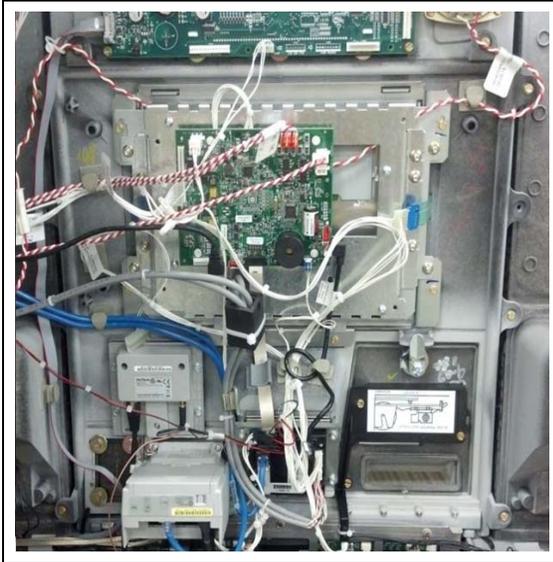
Part Number	Port Number	Function
M03184A00X	P201	Cash Acceptor
R20773-GX	P204	TRIND
M09267A00X	P213	BEEP Connector
M09794A00X	P220	24 VDC Power In
M14337A001	P1	UPM Heater Cable

SECTION 6 - APPENDICES

Appendix C: Verifying Cable Connections

Figure 3 shows the cable connections on the display assembly.

Figure 3: Cable Connections



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To verify the cable connections:

Power Cabling

Ensure that the power cables are connected as follows:

- **PIP3 Board:** P220 port is connected to +24 V Cable (M14340A001).
- **UPM Board:** P1 port is connected to +24 V cable.
- **AFP Board:** P301 port is connected to +24 V cable.

PIP3 Board Cabling

Ensure that the PIP3 board cables are connected as follows:

- PIP3 USB uplink port is connected to the USB Cable (M03695B004) and connected to the P4 port on the UPM.
- P213 port of PIP3 is connected to the M13119 Cable, which connects to the UPM P2.
- P211 port is connected to the Speaker Cable (M09259A004) and to the left speaker.
- P212 port is connected to the Speaker Cable and to the left speaker (if equipped).
- P205 port is connected to M14136A00X Cable and to UPM P5.
- P206 port is connected to 10.4-inch LVDS Cable (M13722A002) and to 10.4-inch display.
- P209 port is connected to 10.4-inch Backlight Cable (M9224B001) and to 10.4-inch display.

SECTION 6 - APPENDICES

UPM Cabling

Ensure that the UPM cables are connected as follows:

- P1 port is connected to 24 V Power Cable (M14340A001).
- P2 port of Softkey Cable (M13119AXXX) is connected to the softkeys, P213 of PIP3 for the beeper, J2111 for the door node, and J192 for the door switch.
- P3 port of Ethernet Cable (Q13850-XX) is connected to P303A/B on AFP board.
- P4 port of USB Cable (M03695B007) is connected to USB UPLINK on PIP3 board.
- P5 port of LVDS Cable (M14136A00X) is connected to P205 on PIP3 board.
- P6 port of LVDS Cable (M14338A001) is connected to P606A/B on UPM board.
- Earth Ground Cable (M04431A002) is connected to the U-channel running across the bottom of the unit cavity. These need to be mounted with separate bolts and not together.

Intercom System

Ensure that the intercom system is connected as follows:

- Speaker Cable (M09259A004) is connected to the speaker located on door.
- Intercom Cable (M11870A003) is connected to P505 port on side A and side B.
- Red and white (Speaker + and Speaker -) cables are connected to the intercom system.
- J411 on 24 V power cable connects to P220 on PIP3. Existing PIP3 power cable connects to P411A.

UX300/UX301 Card Reader Cabling

Ensure that the card reader cables are connected as follows:

- P1 port is connected to 24 V Power Cable (M14340A001).
- Local Area Network (LAN) port of Card Reader Cable (M13443B006) is connected to J305X on the AFP.
- If UX400/UX401 contactless reader is present, the RF port (UX400/UX401 RF) on the card reader connects to the RF port (UX400/UX401 RF) on the contactless reader.
- If UX400/UX401 contactless reader is present, power/data port (UX400/UX401 COMM) on the card reader connects to the power/data (UX400/UX401 COMM) port on the contactless reader.

The card reader has an earth ground cable which is connected to the U-channel.

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