**GILBARCO VEEDER-ROOT**

Encore® 700 S

# Start-up and Service Manual

## Computer Programs and Documentation

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## Federal Communications Commission (FCC) Warning

This equipment has been tested and found to comply with the limits for a Class A digital device pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy, and if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense. Changes or modifications not expressly approved by the manufacturer could void the user's authority to operate this equipment.

## Approvals

### Gilbarco is an ISO 9001:2008 registered company.

#### Underwriters Laboratories (UL):

| UL File# | Products listed with UL |
|---|---|
| MH1941 | All Gilbarco pumps and dispensers that bear the UL listing mark. |
| MH8467 | Transac System 1000 and PAM 1000 |
| E105106 | Dell DHM Minitower |
| E165027 | G-SITE and Passport Systems |

#### California Air Resources Board (CARB):

| Executive Order # | Product |
|---|---|
| G-70-52-AM | Balance Vapor Recovery |
| G-70-150-AE | VaporVac |

### National Conference of Weights and Measures (NCWM) - Certificate of Conformance (CoC):

Gilbarco pumps and dispensers are evaluated by NCWM under the National Type Evaluation Program (NTEP). NCWM has issued the following CoC:

| CoC# | Product | Model # | CoC# | Product | Model # |
|---|---|---|---|---|---|
| 02-019 | Encore | Nxx | 02-036 | Legacy | Jxxx |
| 02-020 | Eclipse | Exx | | G-SITE Printer (Epson) | PA0307 |
| 02-025 | Meter - C Series | PA024NC10 | | G-SITE Distribution Box | PA0306 |
| | Meter - C Series | PA024TC10 | | G-SITE Keyboard | PA0304 |
| 02-029 | CRIND | — | 02-037 | G-SITE Mini Tower | PA0301 |
| 02-030 | TS-1000 Console | — | | G-SITE Monitor | PA0303 |
| | TS-1000 Controller | PA0241 | | G-SITE Printer (Citizen) | PA0308 |
| | Distribution Box | PA0242 | 02-038 | C+ Meter | T19976 |
| | Meter - EC Series | PA024EC10 | 02-039 | Passport | PA0324 |
| | VaporVac Kits | CV | 02-040 | Ecometer | T20453 |
| | | | 05-001 | Titan | KXXY Series |

## Trademarks

| Non-registered trademarks | | | | Registered trademarks | | Service mark |
|---|---|---|---|---|---|---|
| Applause™ Media System | G-SITE® Link™ | PAM™ 5000 | Titan™ | CRIND® | Making Things Better® VaporVac® | GOLD℠ |
| CIM™ | G-SITE® Lite™ | SMART Connect™ | Ultra-Hi™ | Dimension® Series | MPD® | |
| C-PAM™ | Highline™ | SMART CRIND™ | ValueLine™ | e-CRIND® | Passport® | |
| Ecometer™ | Horizon™ | SMART Meter™ | | Eclipse® | Performer® | |
| ECR™ | Insite360™ | SmartPad™ | | Encore® | The Advantage® Series | |
| EMC™ | MultiLine™ | Super-Hi™ | | G-SITE® | Transac® | |
| FlexPay™ | Optimum™ Series | Surge Management System™ | | Gilbarco® | Transac® System 1000 | |
| G-CAT™ | PAM™ | Tank Monitor™ | | InfoScreen® | Trimline® | |
| Gilbert™ | PAM™ 1000 | TCR™ | | Legacy® | TRIND® | |

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# Table of Contents

# 1 – Introduction

## Purpose

This manual provides start-up and service information for the Encore® 700 S CRIND® system.

This manual also applies to The Advantage® Series, Encore 300/500/500 S with E-CIM™ systems that may have been upgraded with FlexPay™ II CRIND retrofit kits and Insite360™ Encore (Remote Management) kits using the DCM2.1/DCM2.2. For more information, refer to *MDE-5314 Insite360™ Encore Remote Management Installation, Start-up, and Service Manual*.

**Figure 1-1: Encore 700 S CRIND System**



## Encore 700 S CRIND System

The Encore 700 S CRIND system is certified as Payment Card Industry-Unattended Payment Terminal (PCI-UPT) 1.X compliant and is designed to provide enhanced security to the fueling environment. The CRIND device uses a 5.7-inch color or 10.4-inch color display, FlexPay Encrypting PIN Pad (EPP) 2.1, and Secure Card Reader 2 (SCR 2).

The following options are available in the CRIND system:
- TRIND®
- Barcode Scanner
- Cash Acceptor
- The Applause™ Media System with Audio/Video
- Insite360 Encore (Remote Management)

# Related Documents

| Document Number | Title | GOLD℠ Library |
|---|---|---|
| MDE-3802 | Encore and Eclipse® Site Preparation Manual | • Encore and Eclipse<br>• Encore and Eclipse Installers<br>• Footprints and Elevations<br>• Site Prep |
| MDE-3902 | Call Button Kit K96636-01 for Encore Dispensers | Encore and Eclipse |
| MDE-3985 | Encore Installation Manual | • Encore and Eclipse<br>• Encore and Eclipse Installers<br>• Footprints and Elevations |
| MDE-4185 | CRIND Encore 700 S Electronics CRIND BIOS Configuration Interface Manual | • CRIND and TRIND<br>• Encore and Eclipse |
| MDE-5062 | FlexPay Maintenance Tool for FlexPay/SPOT CRIND System | • CRIND and TRIND<br>• FlexPay IV EMV® |
| MDE-5314 | Insite360 Encore Remote Management Installation, Start-up, and Service Manual | • FlexPay EPP and SCR<br>• FlexPay IV |

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### IMPORTANT INFORMATION

Installation and site preparation for the Encore 700 S is identical to that of the Encore 500 S. For installation and site preparation details, refer to *MDE-3985 Encore Installation Manual*, *MDE- 3902 Call Button Kit K96636-01 for Encore Dispensers*, and *MDE-3802 Encore and Eclipse Site Preparation Manual*.

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# Recommended Spare Parts

For Encore 700 S recommended spare parts list, refer to .

# Abbreviations and Acronyms

| Term | Description |
|---|---|
| ACI | Application Centric Infrastructure |
| ADA | Americans with Disabilities Act |
| BIOS | Basic Input/Output System |
| CPE | Customer Premise Equipment |
| CRIND | Card Reader in Dispenser |
| DES | Data Encryption Standard |
| DSS | Data Security Standard |
| E-CIM | Enhanced Customer Interface Module |
| ECR™ | Encrypted Card Reader |
| EDH | Enhanced Dispenser Hub |
| EMV | Europay®, MasterCard®, and Visa® |
| EPP | Encrypting PIN Pad |

| Term | Description |
| --- | --- |
| FCB | FlexPay Control Board |
| GOLD | Gilbarco® Online Documentation |
| HIP | Hub Interface PCB |
| IP | Internet Protocol |
| LED | Light Emitting Diode |
| LON | Local Operating Network |
| LRE | Long Reach Ethernet® |
| MOC | Major Oil Company |
| MSDS | Material Safety Data Sheet |
| OMAP | Open Multimedia Applications Platform |
| PCA | Printed Circuit Assembly |
| PCB | Printed Circuit Board |
| PCI | Payment Card Industry |
| PCN | Pump Control Node |
| PIP | Peripheral Interface PCB |
| POS | Point of Sale |
| PIN | Personal Identification Number |
| PPN | Product Part Number |
| PPU | Price per Unit |
| RKL | Remote Key Loading |
| SCR | Secure Card Reader |
| SPOT | Secure Payment Outdoor Terminal |
| SRED | Secure Reading and Exchange of Data |
| SSoM | Secure System on Module |
| TAC | Technical Assistance Center |
| TDES | Triple Data Encryption Standard |
| TLS | Transport Layer Security |
| TRIND | Transmitter/Receiver in Dispenser |
| UPT | Unattended Payment Terminal |

# Common Terms

| Term | Description |
|------|-------------|
| CRIND | CRIND may also be used to refer to the entire in-dispenser payment platform. |
| EPP | A secure, tamper-responsive keypad device responsible for encrypting Personal Identification Number (PIN) data for a debit account as entered by the customer. It is also capable of allowing other non-PIN data to be entered. |
| HIP | Designed for EMV Canada, reused in Encore 700 S product. |
| PCI | An independent council originally formed by American Express®, Discover Financial Services, JCB, MasterCard Worldwide, and Visa International, with the goal of managing the ongoing evolution of the Payment Card Industry Data Security Standard (PCI-DSS). |
| POS | Device in the typical retail-fueling environment that owns the interface to the card acquirer. |
| RS-232 | Standard for serial binary data signals connecting between data terminal equipment and data circuit terminating equipment. |
| TDES | A more secure variant of the Data Encryption Standard (DES) encryption algorithm, uses a 112-bit key, and uses a basic DES algorithm three times per 8-bit block. |

# 2 – 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).

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**⚠ 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.

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### 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 a Gilbarco Authorized Service Contractor or call the 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.

**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.

## Hazards and Actions

| ⚠ **WARNING** |
|---|
| Spilled fuels, accidents involving pumps/dispensers, or uncontrolled fuel flow create a serious hazard. Fire or explosion may result, causing serious injury or death. Follow established emergency procedures. DEF is non-flammable. However it can create a slip hazard. Clean up spills promptly. |

The following actions are recommended regarding these hazards:

Collision of a Vehicle with Unit          Fire at Island          Fuel Spill
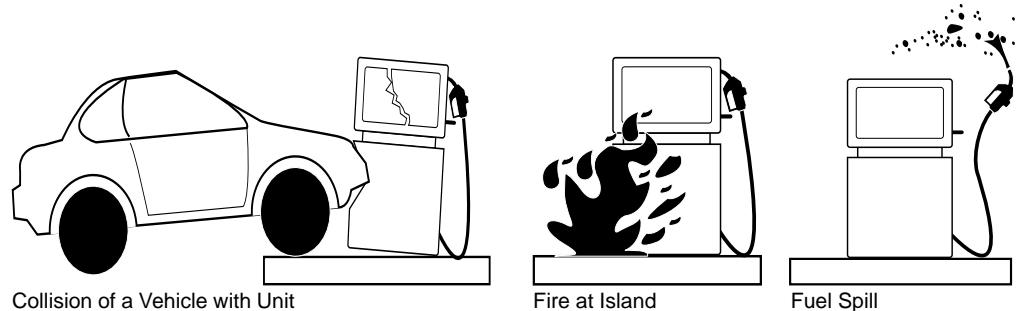
- Do not go near a fuel spill or allow anyone else in the area.
- Use station EMERGENCY CUTOFF immediately. Turn off all system circuit breakers to the island(s).
- Do not use console E-STOP, ALL STOP, and PUMP STOP to shut off power. These keys do not remove AC power and do not always stop product flow.
- Take precautions to avoid igniting fuel. Do not allow starting of vehicles in the area. Do not allow open flames, smoking or power tools in the area.
- Do not expose yourself to hazardous conditions such as fire, spilled fuel or exposed wiring.
- Call emergency numbers.

| **IMPORTANT INFORMATION** |
|---|
| • Before visiting a site for a field trial, the technicians servicing or installing the Encore 700 S must complete Gilbarco safety training.<br>• Safety vests must be worn at all times when at the site.<br>• Ensure compliance with safety rules and regulations set by the customer for performing service procedures at their sites. Some customers may mandate the use of the following when performing service:<br>  - Hard Hats<br>  - Safety Glasses<br>  - Steel-toed ESD Shoes<br>  - Gloves (when possible)<br>• When at the site, the technician must block out both sides of any dispenser that is being serviced. The dispenser must be blocked off with either a car or set of safety cones.<br>• The technician must use the following equipment depending on the work being performed:<br>  - Hearing Protection - if noise is over 85 db<br>  - Job Safety Analysis (JSA) - for the work being performed<br>  - Material Safety Data Sheet (MSDS), if required<br>  - Injury reporting information<br>  - First Aid kits and road side kits |

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# 3 – Start-up

## Configuring CRIND

*Note:  For more information on Encore 700 S Electronics CRIND Basic Input/Output System (BIOS), refer to MDE-4185 CRIND Encore 700 S Electronics CRIND BIOS Configuration Interface Manual.*

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### IMPORTANT INFORMATION

The CRIND device on each side is programmed individually by inserting the CRIND Diagnostic Card (Q12534-170) on each side (cannot be done from the same side). In CRIND diagnostics, you must press **Enter** after each numeric key entry on the FlexPay EPP. "Side 1" appears irrespective of the side being programmed.

Due to enhanced security of the FlexPay UPT, you must press **Enter** after each key entry when using CRIND diagnostics.

---

To access CRIND diagnostic programming, proceed as follows:

**1**  Insert and remove the CRIND diagnostic card.

*Note:  Card reader is sensitive to light and may not be able to read the card if the door is open. Close the main doors to eliminate any outside light intrusion.*

**Figure 3-1: Swiping CRIND Diagnostic Card**



CRIND Diagnostic Card (Q12534-170)

---
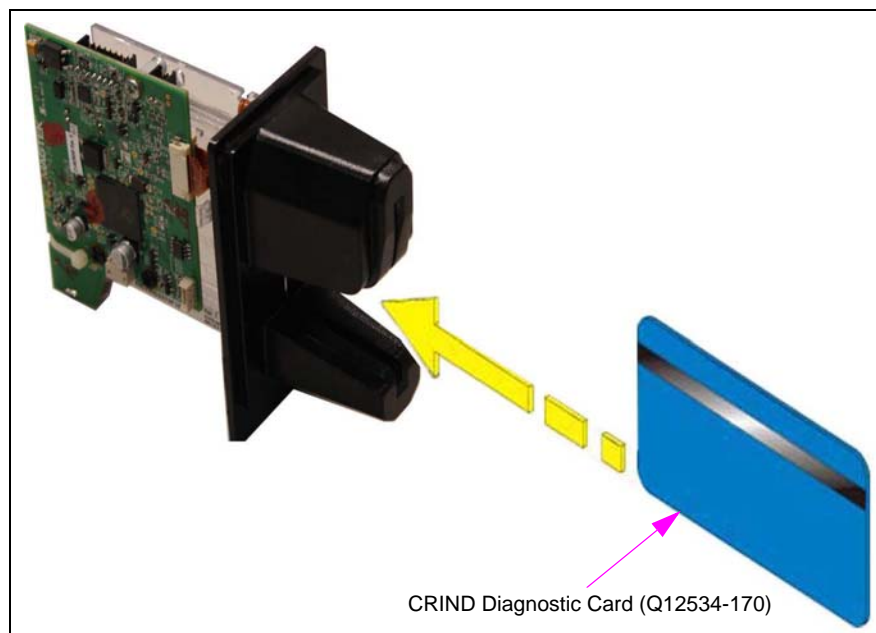
**2** From the Main Menu, press **1** > **Enter**. The CRIND Config menu is displayed.

**Figure 3-2: CRIND Config Menu**

```
┌─────────────────────────────────────┐
│            CRIND Config              │
│                                      │
│  1. CRIND IDs                        │
│  2. CRIND Mode                       │
│  3. Generic BAUD Rate                │
│  4. Force BIOS Coldstart             │
│  5. Force App Coldstart              │
│  6. Set Date / Time                  │
│                                      │
│                                      │
│  Cancel = Exit                       │
└─────────────────────────────────────┘
```

*Note:  In most of the screens, pressing **Cancel** returns to the previous menu.*

# CRIND IDs

The CRIND IDs function allows you to program the CRIND ID for the side that is in front of you.

**1** From the CRIND Config menu, press **1** > **Enter**. The CRIND IDs menu is displayed.

**Figure 3-3: CRIND IDs Menu**
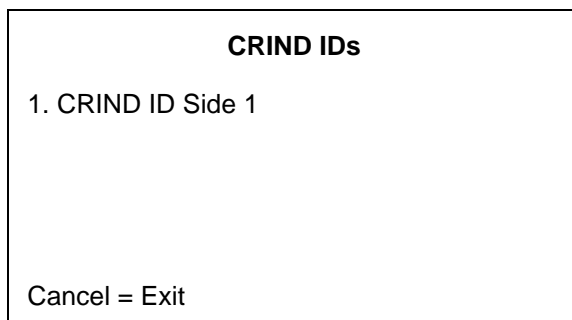
```
┌─────────────────────────────────────┐
│             CRIND IDs                │
│                                      │
│  1. CRIND ID Side 1                  │
│                                      │
│                                      │
│                                      │
│                                      │
│  Cancel = Exit                       │
└─────────────────────────────────────┘
```
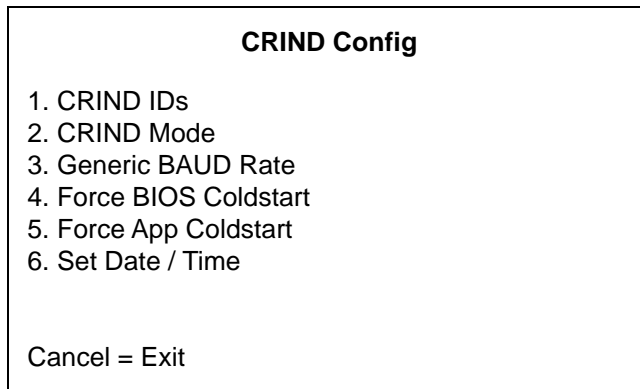
*Note:  Each CRIND device is programmed separately by inserting the CRIND diagnostic card on each side (cannot be done from the same side). The CRIND ID screen is called "Side 1", irrespective of the side being programmed.*

2    Press **1** > **Enter**. The CRIND ID Side 1 screen is displayed. (see Figure 3-4).

*Note:  Each CRIND device is programmed separately by inserting the CRIND diagnostic card*
*on each side (cannot be done from the same side). The CRIND ID screen is called*
*"Side 1" irrespective of the side being programmed.*

**Figure 3-4: CRIND ID Side 1**

```
            CRIND ID Side 1

CRIND ID                              1   ◄────  The current CRIND communication
(Range: 1 - 32, 99 = disable)                   address for side 1.


Number Keys = Direct Entry
Clear = Erase Entry
Enter = Save Value and Exit
Cancel = Discard Change and Exit
```

3    Press numeric keys to enter one-digit or two-digit CRIND ID. To enter a two-digit CRIND ID,
for example, 32, press **3** > **Enter** and **2** > **Enter**. Legal values for this field are 1-32 and 99.
Setting the value as 99 configures the side not to answer polls on the CRIND communication
loop. This is useful for field troubleshooting and diagnostic purposes.

4    Press **Enter** to save the edited CRIND ID and exit. The CRIND IDs menu is displayed.

~ OR ~

Press **Cancel** to discard changes and exit. The program returns to the CRIND IDs menu.

# CRIND Mode

To configure the CRIND Mode, proceed as follows:

1    From the CRIND Config menu, press **2** > **Enter**. The CRIND Mode menu is displayed.

**Figure 3-5: CRIND Mode**

```
            CRIND Mode
CRIND Mode                         MOC  ◄────  Shows current setting. For new
1. MOC                                          installations or CRIND devices that have
2. Generic                                      undergone a purge or BIOS coldstart,
                                                default will not be configured.



Enter = Save Value and Exit
Cancel = Discard Change and Exit
```

**2** Press the following numeric keys followed by **Enter** to change the current CRIND Mode setting:

- **1** causes the unit to operate in Major Oil Company (MOC) CRIND Mode.
- **2** causes the unit to operate in Generic CRIND Mode.

**3** Press **Enter** to save changes and exit. The CRIND Config menu is displayed.

~ OR ~

Press **Cancel** to discard changes and exit. The program returns to the CRIND Config menu.

# Configuring Network for Sites with DCM2 or Earlier (without SSoM)

---

⚠ **WARNING**

CRIND side Internet Protocol (IP) addresses must not be changed from factory default unless one of the following three conditions apply:
1) The site requires a non-standard IP scheme.
2) The site is configured for non-standard CRIND IDs.
3) Some third-party Point of Sale (POS) systems start with "0" instead of "1" as their first CRIND ID.
For example, dispenser 1 is configured for CRIND IDs 1/4 instead of 1/2.

---

*Note: The CRIND device on each side is independent of the CRIND device on the other side. Each side must be programmed individually.*

From the Main Menu, press **3** > **Enter**. The Network Config menu is displayed.

**Figure 3-6: Network Config Menu**

```
                    Network Config


1. Reset to Default IPs
2. Set IP Addresses
3. Apply Network Settings
4. View Network Settings
5. Hide Network Settings

Cancel = Exit
```

The IP addressing scheme for the units without Secure System on Module (SSoM) is 10.5.55.XXX.

| FlexPay II DCM1.0 and DCM2.0 | |
|---|---|
| **Unit** | **Default IP Address** |
| Side A | 10.5.55.71 |
| Side B | 10.5.55.72 |
| Netmask | 255.255.255.0 |
| Default Gateway | 10.5.55.1 |
| SM Server | 10.5.55.66 |
| *IP Addressing | 10.5.55.70 + CRIND ID |

| FlexPay IV DCM1.0 and DCM2.0 | |
|---|---|
| **Unit** | **Default IP Address** |
| UPM A | 10.5.55.71 |
| UX 300 A | 10.5.55.72 |
| UPM B | 10.5.55.73 |
| UX 300 B | 10.5.55.74 |
| GSoM A | 10.5.55.75 |
| GSoM B | 10.5.55.76 |
| Default Gateway | 10.5.55.1 |
| Netmask | 255.255.255.0 |
| SM Server | 10.5.55.66 |
| *IP Addressing | 10.5.55.70 + CRIND ID |

# Configuring Network with DCM2.1 (with SSoM) and Later Hardware

> ## ⚠ WARNING
>
> CRIND side IP addresses must not be changed from factory default unless one of the
> following three conditions apply:
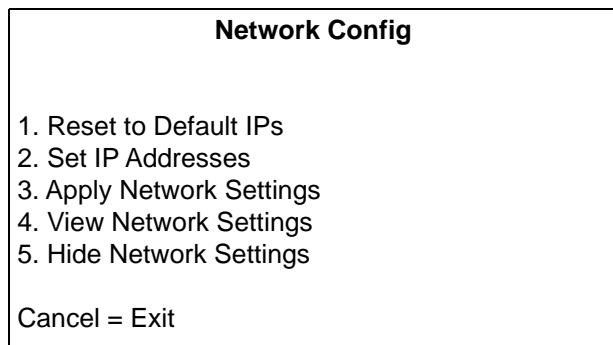> 1) The site requires a non-standard IP scheme.
> 2) The site is configured for non-standard CRIND IDs.
> 3) Some third-party POS systems start with "0" instead of "1" as their first CRIND ID.
> For example, dispenser 1 is configured for CRIND IDs 1/4 instead of 1/2.

*Note: The CRIND device on each side is independent of the CRIND device on the other side.
Each side must be programmed individually.*

From the Main Menu, press **3** > **Enter**. The Network Config menu is displayed.

**Figure 3-7: Network Config Menu**

```
                Network Config


1. Reset to Default IPs
2. Set IP Addresses
3. Apply Network Settings
4. View Network Settings
5. Hide Network Settings

Cancel = Exit
```

The IP addressing scheme for the units with SSoM is 172.16.100.XXX.

| FlexPay II DCM2.1 | |
|---|---|
| **Unit** | **Default IP Address** |
| Side A | 172.16.100.1 |
| Side B | 172.16.100.3 |
| Netmask | 255.255.255.0 |
| Default Gateway | 172.16.100.254 |
| SM Server | 10.5.55.66 |

| FlexPay IV DCM2.1 | |
|---|---|
| **Unit** | **Default IP Address** |
| UPM A | 172.16.100.1 |
| UX 300 A | 172.16.100.2 |
| UPM B | 172.16.100.3 |
| UX 300 B | 172.16.100.4 |
| GSoM A | 172.16.100.5 |
| GSoM B | 172.16.100.6 |
| Default Gateway | 172.16.100.254 |
| Netmask | 255.255.255.0 |
| SM Server | 10.5.55.66 |

*Note:  Each dispenser with an SSoM can be set to the same IP scheme across the entire forecourt. The SSoM will need to be configured. For more information, refer to MDE-5314 Insite360 Encore Remote Management Installation, Start-up, and Service Manual.*

---

# Resetting Default IPs

From the Network Config menu, press **1** > **Enter**. This option resets all the IP addresses to the default value. The warning message as shown in Figure 3-8 is displayed before resetting the values to factory defaults.

**Figure 3-8: Reset to Default IPs**

<div>

**Reset to Default IPs**

Warning: This action will reset all IP address to
Gilbarco Factory Defaults.

Enter = Continue
Cancel = Exit

</div>
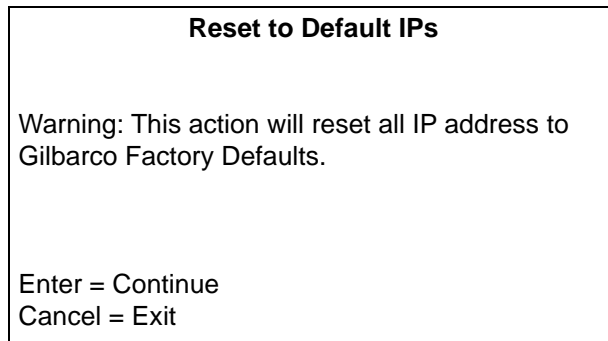
*Notes: 1) If the unit has a non-standard CRIND ID, then the IP addresses in default mode may
be assigned to an incorrect IP address. If the CRIND ID is based on a non-standard
setting, ensure that the IP is set properly. The normal patterns for CRIND IDs are
1/2, 3/4, 5/6, and so on. Due to different types of POS systems and forecourt
configurations, some sites may elect to set non-standard CRIND IDs.*

*2) The IP addresses must agree from side to side. If the IP addresses do not agree, you
will experience problems where side A does not communicate to side B through Hub
Interface [Printed Circuit Board (PCB)] (HIP). The problem symptoms include, no
big numeral printed on paper at power up when paper is fed into the printer, and no
card reader function or printer function on side B.*

*3) After the IP addresses are modified from the defaults, they are no longer adjusted
automatically when the CRIND IDs are modified.*

# Setting IP Addresses

From the Network Config menu, press **2** > **Enter**. The Set IP Addresses menu is displayed.

+------------------------------------------------------------+
| # IMPORTANT INFORMATION |
+------------------------------------------------------------+
| Both Side A IP address and Side B IP address must be programmed on each side of the dispenser. Side A is the side that you are in front of each time. |
+------------------------------------------------------------+

**Figure 3-9: Set IP Addresses**

```
                Set IP Addresses
1. Set CRIND Side A IP
2. Set CRIND Side B IP
4. Set SMART Merchandising Server IP
5. Set Netmask Address
6. Set Gateway Address



Cancel = Exit
```

## Setting CRIND Side A IP

From the Set IP Addresses menu, press **1** > **Enter**. The CRIND Side A IP screen is displayed.

**Figure 3-10: CRIND Side A IP (example without SSoM)**

```
                CRIND Side A IP
            000 . 000 . 000 . 000
Enter number blocks using three digits each with
leading zeros if necessary.
IP block range: 000 – 255
Example: 010 . 005 . 055 . 071



Clear = Erase Entry
Enter = Save Value and Exit
Cancel = Discard Changes and Exit
```

*Notes: 1) When setting the IP Addresses, press **Enter** after each digit. For example, for IP address 10.5.55.77, press **1** > **Enter**, **0** > **Enter**, **.** > **Enter**, and so on.*

*2) Default IP addresses will always be 10.5.55.70 + the set CRIND ID.*

To set Side A IP address, number block must be in the 000-255 range and has to be completed with leading zeros as follows:
- Press **Clear** to erase all entered digits and start again.
- Press **Enter** to validate if it is a correct IP address and to store the result. If the IP address is not valid the input is cleared.
- Press **Cancel** to discard the input and return to Set IP Addresses menu.

### Setting CRIND Side B IP

*Note: Set CRIND Side B IP option is not visible on single side units.*

From the Set IP Addresses menu, press **2** > **Enter**. The CRIND Side B IP screen is displayed.

*Note: Side B will correspond with the side opposite of where you are standing.*

**Figure 3-11: CRIND Side B IP (example without SSoM)**

```
                    CRIND Side B IP
                 000 . 000 . 000 . 000
Enter number blocks using three digits each with
leading zeros if necessary.
IP block range: 000 – 255
Example: 010 . 005 . 055 . 072



Clear = Erase Entry
Enter = Save Value and Exit
Cancel = Discard Changes and Exit
```

To set Side B IP address, number block must be in the 000-255 range and has to be completed with leading zeros as follows:
- Press **Clear** to erase all entered digits and start again.
- Press **Enter** to validate if it is a correct IP address and to store the result. If the IP address is not valid, the input is cleared.
- Press **Cancel** to discard the input and return to Set IP Addresses menu.

### Setting SMART Merchandising Server IP
From the Set IP Addresses menu, press **4** > **Enter**. The SMART Merchandising IP screen is displayed.

*Note: The default value for SMART Merchandising Server, Netmask, and Gateway will work for most sites.*

**Figure 3-12: SMART Merchandising IP**

```
               SMART Merchandising IP
                 000 . 000 . 000 . 000
Enter number blocks using three digits
each with leading zeros if necessary.
IP block range: 000 – 255
Example: 010 . 005 . 055 . 066



Clear = Erase Entry
Enter = Save Value and Exit
Cancel = Discard Changes and Exit
```

To set SMART Merchandising Server IP address, number block must be in the 000-255 range and has to be completed with leading zeros as follows:
- Press **Clear** to erase all entered digits and start again.
- Press **Enter** to validate if it is a correct IP address and to store the result. If the IP address is not valid, the input is cleared.
- Press **Cancel** to discard the input and return to Set IP Addresses menu.

### Setting Netmask Address
From the Set IP Addresses menu, press **5** > **Enter**. The Netmask address screen is displayed.

**Figure 3-13: Netmask Address**

```
                 Netmask address
               000 . 000 . 000 . 000
Enter number blocks using three digits
each with leading zeros if necessary.
Netmask block range: 000 – 255
Example: 255 . 255 . 255 . 000


Clear = Erase Entry
Enter = Save Value and Exit
Cancel = Discard Changes and Exit
```

To set Netmask address, number block must be in the 000-255 range and has to be completed with leading zeros, as follows:
- Press **Clear** to erase all entered digits and start again.
- Press **Enter** to validate if it is a correct IP address and to store the result. If the IP address is not valid, the input is cleared.
- Press **Cancel** to discard the input and return to Set IP Addresses menu.

### Setting Gateway Address
From the Set IP Addresses menu, press **6** > **Enter**. The Gateway Address screen is displayed.

**Figure 3-14: Gateway Address**

```
                 Gateway Address
               000 . 000 . 000 . 000
Enter number blocks using three digits
each with leading zeros if necessary.
Netmask block range: 000 – 255
Example: 010 . 005 . 055 . 001


Clear = Erase Entry
Enter = Save Value and Exit
Cancel = Discard Changes and Exit
```

To set Gateway address, number block must be in the 000-255 range and completed with leading zeros as follows:
- Press **Clear** to erase all entered digits and start again.
- Press **Enter** to validate if it is a correct IP address and to store the result. If the IP address is not valid the input is cleared.
- Press **Cancel** to discard the input and return to Set IP Addresses menu.

## Applying Network Settings

<table>
<tr><td align="center">

# IMPORTANT INFORMATION

**To activate Network settings, the required network settings MUST be applied.**
</td></tr>
</table>

From the Network Config menu, press **3** > **Enter**. The Apply Network Settings screen is displayed.

**Figure 3-15: Apply Network Settings**

<table>
<tr><td>

**Apply Network Settings**

Network settings applied



Cancel = Exit
</td></tr>
</table>

<table>
<tr><td align="center">

# IMPORTANT INFORMATION

- After performing IP programming on one side, repeat it on the other side. Both side A and side B must be programmed on each side. Side A is the side that you are in front of each time.
- Select **Apply Network Settings** after making required network changes. If network settings are not applied, the changes you make will not be activated.
</td></tr>
</table>

## Viewing Network Settings

From the Network Config menu, press **4** > **Enter**. The View Network Settings screen is displayed. This option enables to view the currently applied network settings.

**Figure 3-16: View Network Settings**

```
┌─────────────────────────────────────┐
│          View Network Settings       │
│                                      │
│  CRIND Side A   010.005.055.071      │
│  CRIND Other Side   010.005.055.072  │
│                                      │
│  SM Server       010.005.055.066     │
│  Netmask         255.255.255.000     │
│  Gateway         010.005.055.001     │
│                                      │
│  Cancel = Exit                       │
└─────────────────────────────────────┘
```

The following network settings are displayed (see Figure 3-16):
- Side A IP Address
- Other Side IP Address
- SMART Merchandising Server IP Address
- Network Mask
- Gateway Address

*Notes: 1) For single side units, CRIND Other Side IP address displays what is expected to be the IP address, not the real IP address.*

*2) If the SMART Connect™ option is disabled, then the SMART Connect Server IP address is not displayed.*

## Hiding Network Settings

From the Network Config menu, press **5** > **Enter**. The Hide Network Settings screen is displayed before the network settings are hidden.
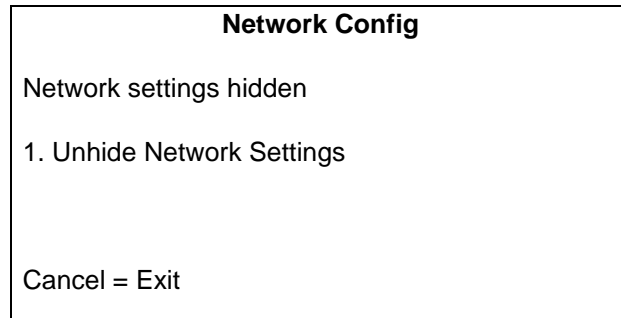
**Figure 3-17: Hide Network Settings**

```
┌─────────────────────────────────────┐
│          Hide Network Settings       │
│                                      │
│  WARNING: Network settings cannot be changed │
│  or viewed once hidden. The network settings will │
│  be reset to factory defaults if it is decided to │
│  unhide them later.                  │
│                                      │
│                                      │
│  Enter = Hide and Exit               │
│  Cancel = Abort                      │
└─────────────────────────────────────┘
```
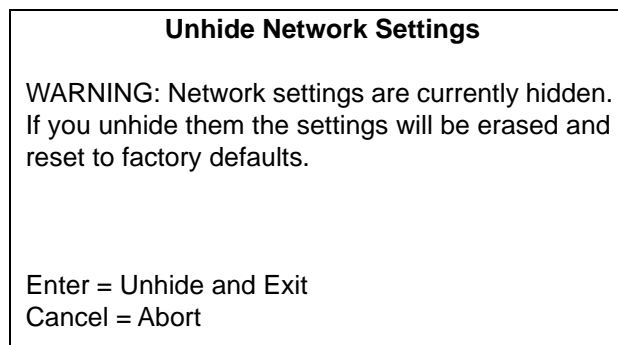
## Network Settings (Hidden)

Press **Enter**. The Network Config screen is displayed. This option enables you to unhide the applied network settings.

**Figure 3-18: Network Settings (Hidden)**

```
                    Network Config

Network settings hidden

1. Unhide Network Settings



Cancel = Exit
```

Press **1** > **Enter**. The warning message shown in Figure 3-19 is displayed. Unhiding Network Settings will reset IP addresses to factory values.

**Figure 3-19: Unhide Network Settings**

```
              Unhide Network Settings

WARNING: Network settings are currently hidden.
If you unhide them the settings will be erased and
reset to factory defaults.



Enter = Unhide and Exit
Cancel = Abort
```

# Adjusting Audio Volume Level

| IMPORTANT INFORMATION |
|---|
| Adjust the audio volume level on both sides of the unit individually. |

The audio must be set for all Encore 700 S CRIND units. Audio is used for Applause Media System functionality and for log collection for engineering troubleshooting purposes. Log collect utilizes audio prompting instructions. Gilbarco recommends a starting value of "90" to test the audio level. The value can be adjusted depending on the ambient noise level of the forecourt.

To adjust the audio volume level, proceed as follows:

**1**  Press **1** > **Enter** for the Main Menu.

**2**  Press **2** > **Enter** for device configuration.

**3**  Press **2** > **Enter** for audio settings.

**4**  Press **1** > **Enter** for side 1.

**Figure 3-20: Volume-Side 1**

```
            Volume—Side 1

20
Volume (Range: 1 - 99)               Test>
Number Keys = Direct Entry
Clear = Erase Entry                  Up>
Enter = Apply Entry
Cancel = Exit                        Down>
```

**5**  Set the audio volume level by either entering the required number or using the up or down softkey functions.

*Note: It is recommended that you set the audio volume based on the ambient noise at the site.*

**6**  Press **Enter** to save the settings.

**7**  Press **Cancel** to end the session.

# Setting Default Personality

The personality screen is the background on the screen, that customers see during CRIND device prompting. The technician must verify with the customer the preferred personality screen before programming.

To program the required personality screen as the default personality, proceed as follows:
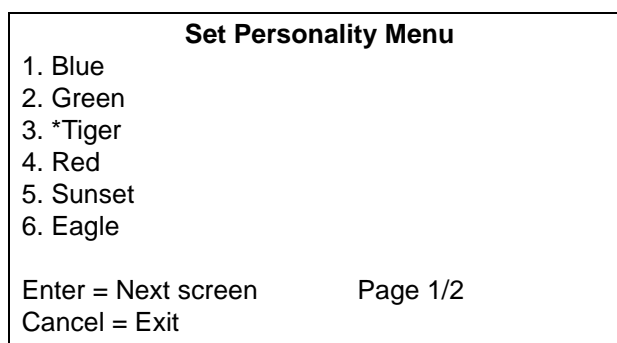
**1**  From the Main Menu on the CRIND device, press **6** > **Enter**. The Parameters Menu is displayed.

**2**  From the Parameters Menu, press **1** > **Enter**. The Display Manager Menu is displayed.

**Figure 3-21: Display Manager Menu**

```
            Display Manager Menu

  1. Set Default Personality




  Cancel = Exit
```
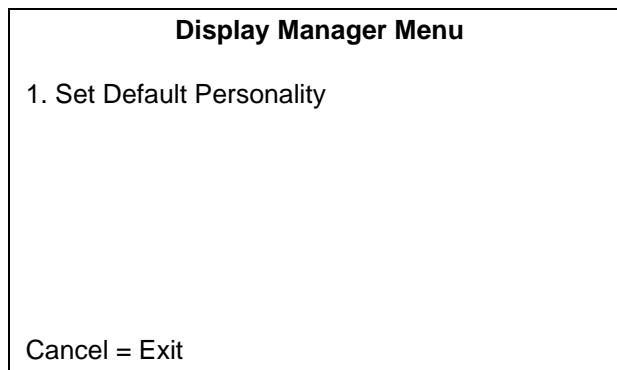
**3**  From the Display Manager Menu, press **1** > **Enter**. The Set Personality Menu is displayed.

**Figure 3-22: Set Personality Menu**

```
            Set Personality Menu
  1. Blue
  2. Green
  3. *Tiger
  4. Red
  5. Sunset
  6. Eagle

  Enter = Next screen          Page 1/2
  Cancel = Exit
```

This menu shows a list of available personalities. Current default personality appears with an '*' in front of its name. This list is dynamic and may have more than one screen. Press **Enter** to move to the next screen. Press the required number to select the personality indicated by the customer.

# Setting Date and Time

Date and time must be set on the Encore 700 S CRIND devices. To set the date and time, proceed as follows:

**1** From the CRIND Config menu, press **6 > Enter**. The Set Date/Time menu is displayed as shown in Figure 3-23.

**Figure 3-23: Set Date/Time Menu**

```
┌─────────────────────────────────────────┐
│             Set Date / Time              │
│            MM-DD-YYYY hh:mm               │
│                                          │
│                                          │
│      Current setting 02-16-2011 15:32    │
│      Use leading zeroes in each field if │
│      necessary. Time is a 24 hour clock. │
│                                          │
│                                          │
│                                          │
│                                          │
│  Cancel = Exit                           │
└─────────────────────────────────────────┘
```

**2** Type all digits from right to left and press **Enter** after each digit. All fields must use leading zeros to pad the fields as required. The field definitions are as follows:
  - MM = Month (for example, 02 = February)
  - DD = Day of month (for example, use 04 for 4th day of month)
  - YYYY = 4 digit year
  - hh = hour, based on 24-hour clock (for example, 16 = 4 PM)
  - mm = minutes

*Note: If an error occurs, press **Clear** to clear the field.*

**3** After all the fields are updated, the option to save the new date/time is displayed as shown in Figure 3-24.

**Figure 3-24: New Set Date/Time**

```
┌─────────────────────────────────────────┐
│             Set Date / Time              │
│            02-16-2011 15:48               │
│                                          │
│                                          │
│      Current setting 02-16-2011 15:32    │
│      Use leading zeroes in each field if │
│      necessary. Time is a 24 hour clock. │
│                                          │
│                                          │
│  Enter = Save Value and Exit             │
│  Cancel = Exit                           │
└─────────────────────────────────────────┘
```

**4** Press **Enter** to validate the new date/time and set the new time, if valid (that is, the day is not greater than the number of days in the given month, the month is less than 13, and so on).

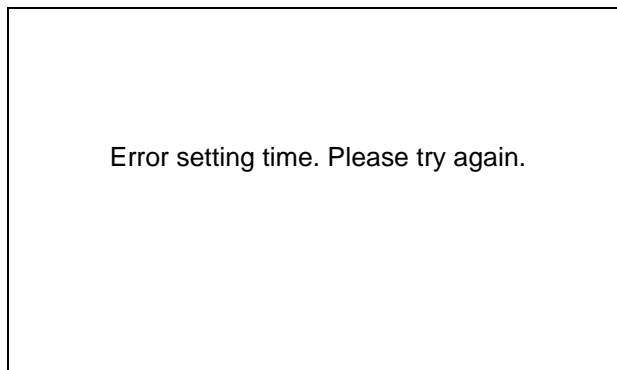~ OR ~

Press **Cancel** to return to the CRIND menu.

**5** If you press **Enter**, one of the following menus is displayed:

**a** If the date/time entered is valid, then the confirmation screen is displayed for about three seconds as shown in Figure 3-25, and the screen automatically returns to the CRIND menu.

**Figure 3-25: Set Date/Time Successful Confirmation**

```
┌─────────────────────────────────┐
│                                 │
│                                 │
│                                 │
│         New date / time is:     │
│         02-16-2011 15:48        │
│                                 │
│                                 │
│                                 │
│                                 │
└─────────────────────────────────┘
```

**b** If the date/time entered is invalid, then the error screen is displayed for about three seconds as shown in Figure 3-26 and the screen automatically returns to the Set Date/Time screen.

**Figure 3-26: Set Date/Time Error Notification**

```
┌─────────────────────────────────┐
│                                 │
│                                 │
│   Error setting time. Please try again. │
│                                 │
│                                 │
│                                 │
│                                 │
└─────────────────────────────────┘
```

# Encore 700 S Block Diagrams

**Figure 4-1: Encore 700 S Block Diagram 1**
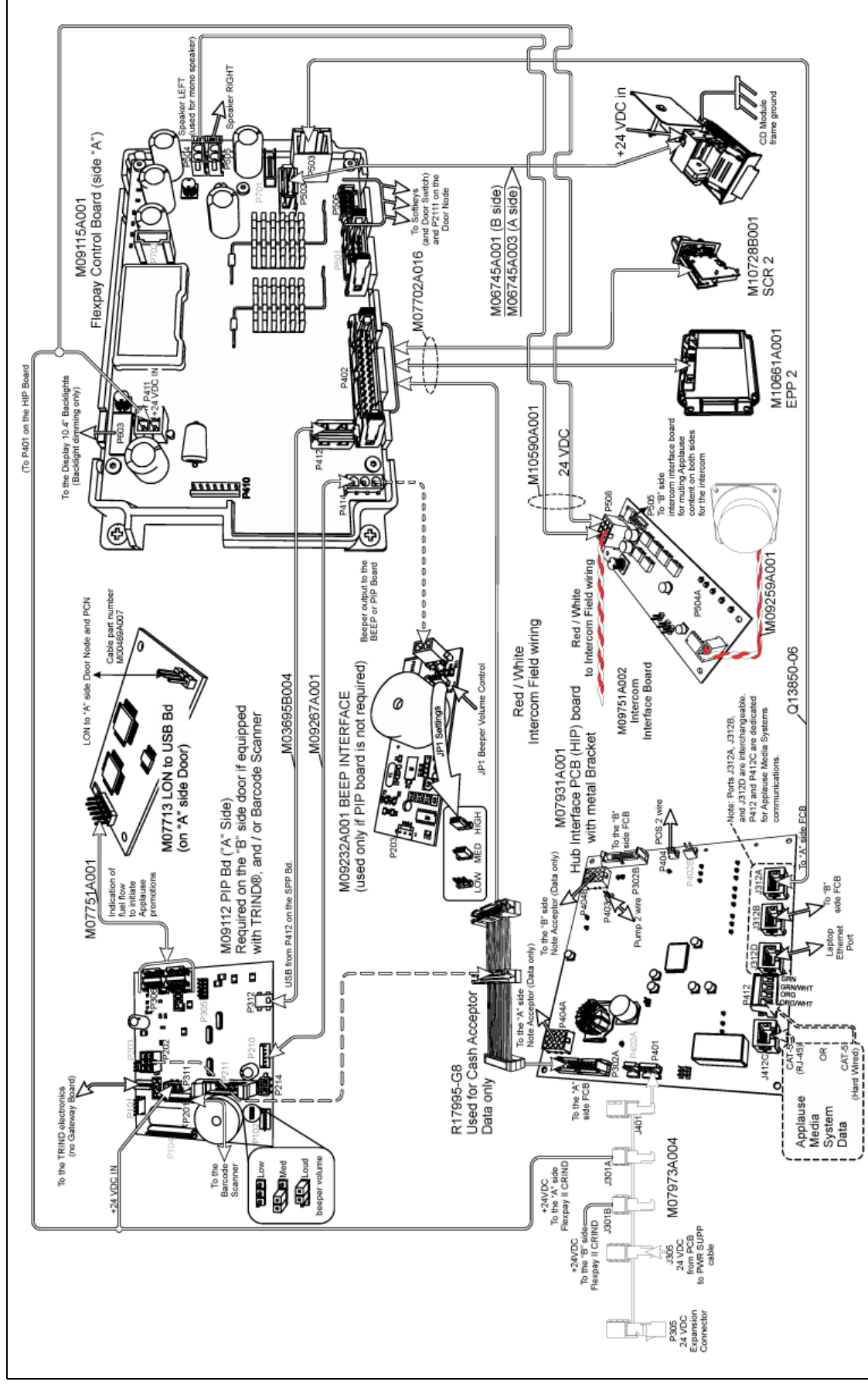
## Figure 4-2: Encore 700 S Block Diagram 2
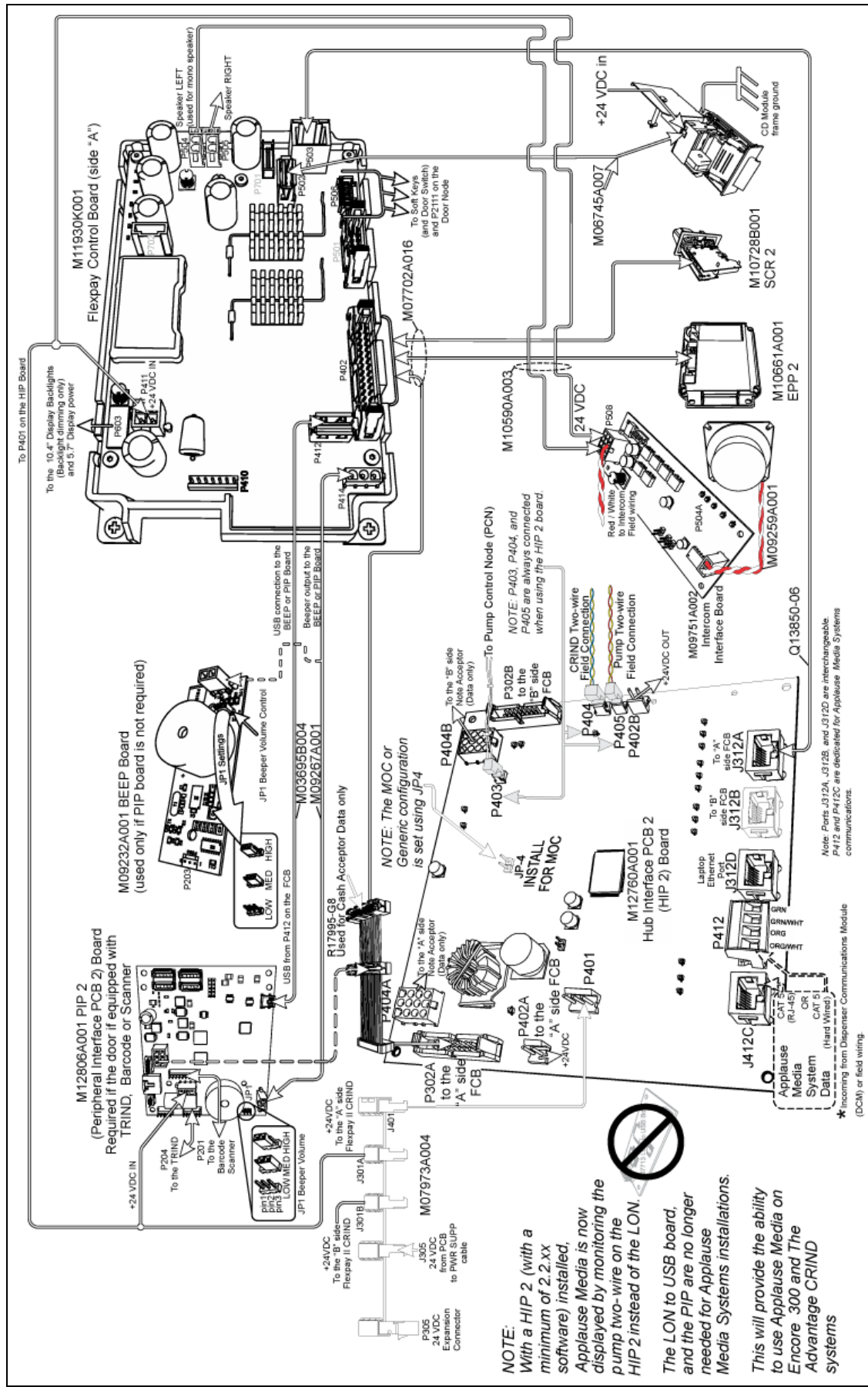
## Figure 4-3: Encore 700 S Block Diagram 3



M09115A001 FCB

To 24 VDC Power Source

To the Display Back lights 10.4-inch
(Back light dimming only - not currently supported)

24 VDC

P411 - 24 VDC IN

To P401
on the HIP Board

M10370B001 DISPLAY, COLOR 10.4-inch

M09115A001 FCB
(Rear View)

P602
(Video OUT)

P601

Note J1 position 1
Jumper IN = 10.4-inch color

**10.4-inch Display Connections**

M09115A001 FCB

To the Display Back Lights
(Back light power and dimming)

P411 - 24 VDC IN

To P401
on the HIP Bd.

M10369B001 Display Color 5.7-inch

M09115A001
FCB (Rear View)

P602
(Video OUT)

P601

Note J1 position 1
Jumper IN = 10.4-inch color
Jumper OUT = 5.7-inch color

**5.7-inch Display Connections**

**Figure 4-4: Block diagram for DCM2.2 Two-Wire Configuration (Dedicated)**
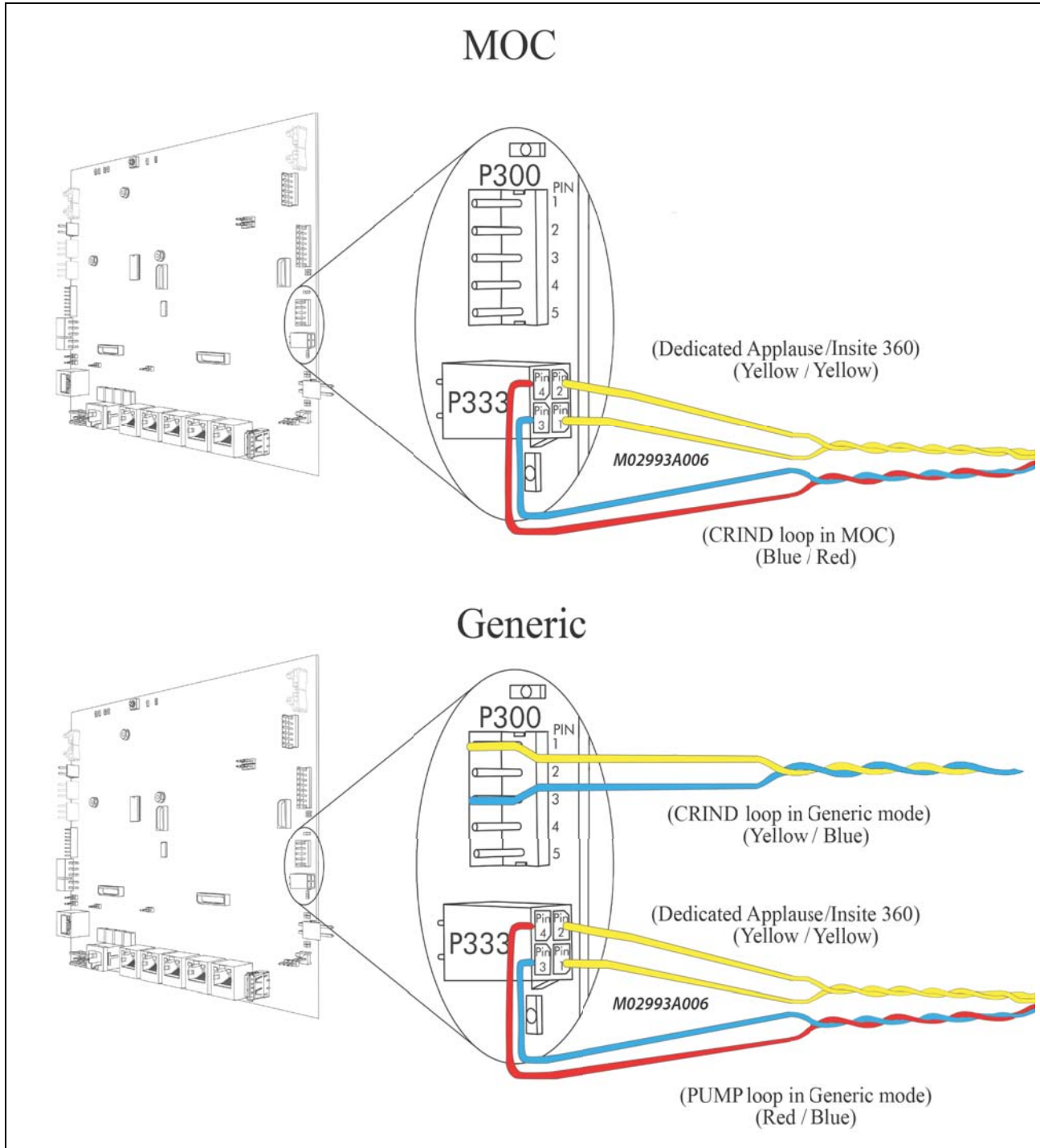
**Figure 4-5: Block diagram for DCM2.2 Two-Wire Configuration (Non-Dedicated)**
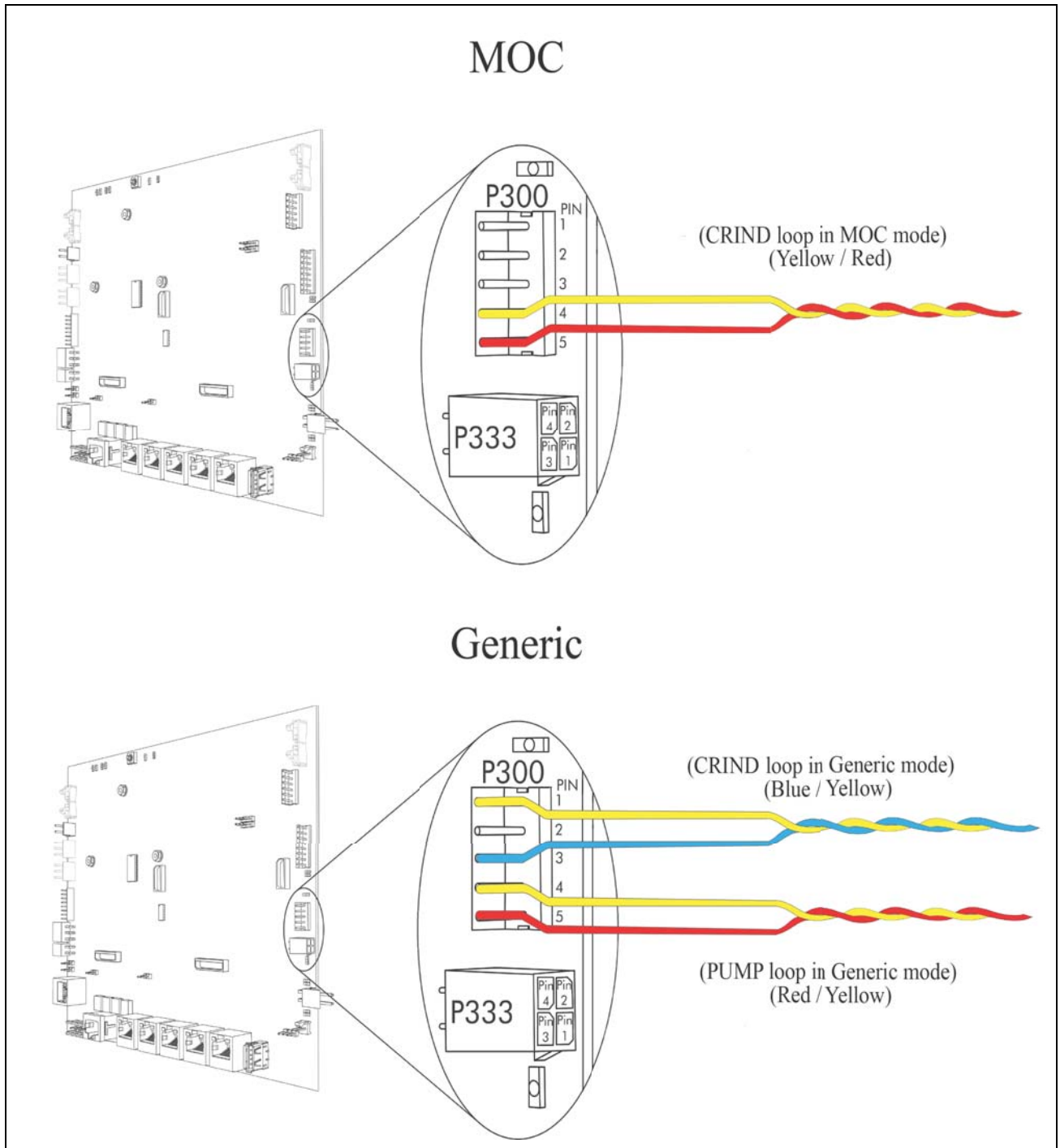
# Diagnostics and Visual Checks (After Installation)

## Diagnostics Mode

☐ Run System Health Report (press **Clear** and swipe the CRIND diagnostic card, verify the settings and ensure that the pump and door node versions are displayed).

☐ Ensure that printer works, all CRIND options required are enabled, IP address, pump IDs are set correctly, CRIND time set, card reader battery voltage is correct, card reader type, PIN pad type, for any tampers present, and so on.

☐ Verify if all the CRIND keys function correctly (including softkeys and auxiliary keypad).

☐ Go into the cash acceptor diagnostic and verify if the cash acceptor alarm switches and activate door alarms.

☐ Test the Applause Media System functionality (if customer has Applause Media System).

☐ Verify if the Applause Media System advertising is showing up on all the dispensers during a fueling transaction.

## Visual Checks and Transactions

☐ Ensure that no wires are trapped in hinges, gaskets, or visible from the exterior of the pump.

☐ Perform a CRIND transaction [both credit and debit, fleet and loyalty cards (if applicable)].

☐ Ensure that the CRIND Light Emitting Diodes (LEDs) are functioning correctly.

☐ Ensure that the Customer Premise Equipment (CPE)/Long Reach Ethernet [LRE (turtle)] is powered up and operational (if applicable for Applause Media System).

☐ Verify if the Americans with Disabilities Act (ADA) functions correctly (if present).

☐ Ensure that the communication with the POS is correct.

☐ Ensure that the Price per Unit (PPU) does not blank out when dispensing.

☐ Ensure that the CRIND prompting on the display, graphic quality, Applause Media System content are present (if applicable).

☐ TRIND: Verify the response obtained with the hand-held transponder tester.
*Note: Verify that the units with the E500 square door have "Enable Wireless Sync Option" turned on. Without this feature, TRIND units in E500 can interfere with each other. For more information, refer to "Appendix E: FlexPay II CRIND Retrofit TRIND Settings" on page E-1.*

☐ Perform TRIND test in diagnostics. Ensure that the STAT and SYNC LEDs blink on TRIND light board.

☐ Power cycle the unit and verify if the unit is functioning correctly.

☐ Test the cash acceptor in diagnostics and verify cash acceptor errors are not showing up on the POS.

# Encore 700 S PCBs

Figure 4-6 shows the PCB details for Encore 700 S.

**Figure 4-6: Easylon® USB Socket Interface (EIA 485) Board [M07713A001 (USB to LON Board)]**



*Note: The dimensions are in millimeters.*
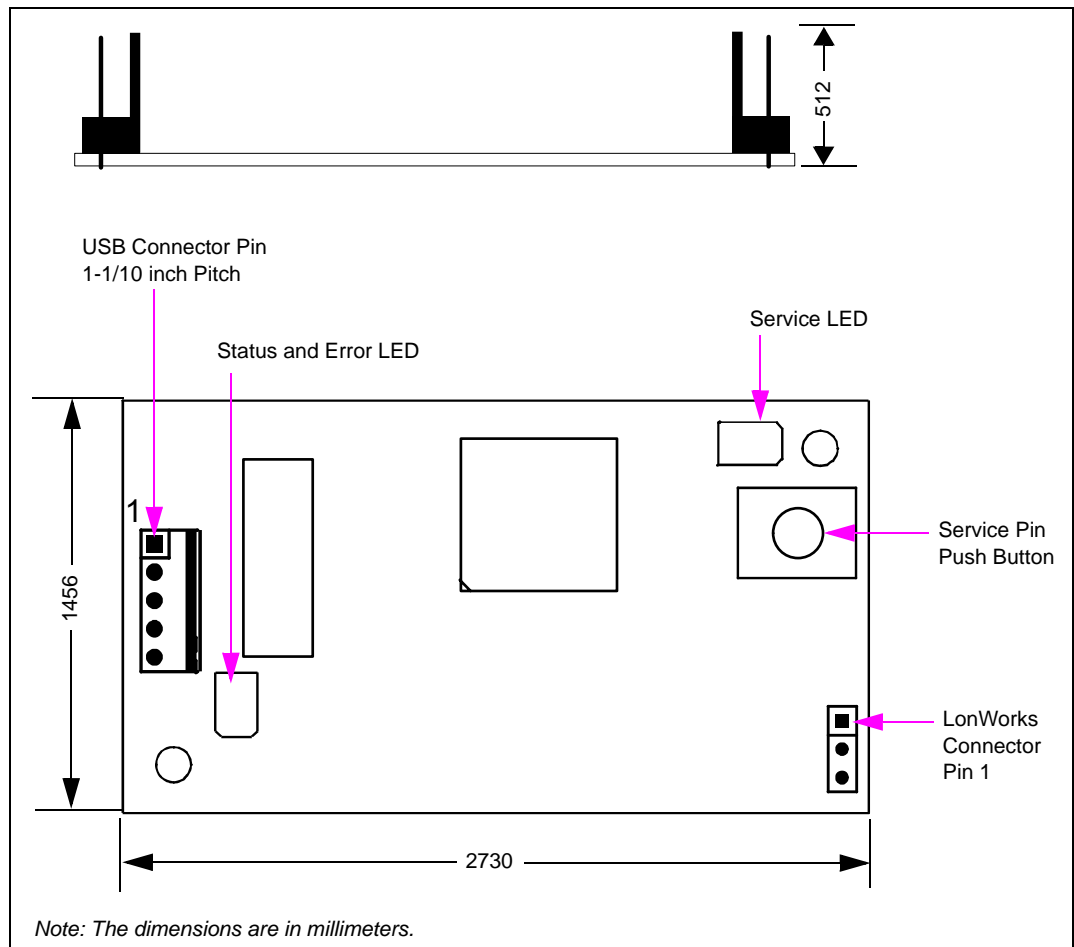
## LEDs

This section provides the LEDs and the connector details in the PCBs.

### Board Connections and Cables

The following table lists the connection details:

| Connector# | Via Cable | To Board | At Connector # |
|---|---|---|---|
| 5-pin connector | M07751A001 | M09112A001 | P306 |
| 3-pin connector | M004894007 | M05835A001 | P2109 |
| | | M01922A003 | P1103 |

### Service LED

The following table lists the service LED status details:

| Status | Description |
|--------|-------------|
| Flashing | No communication |
| Off | Normal operation |

### Status/Error LED

The following table lists the status/error LED status details:

| Status | Description |
|--------|-------------|
| Green blinking | Normal communication |
| Red | Error |

Figure 4-7 shows the Encore 700 S Peripheral Interface PCB (PIP).

**Figure 4-7: Encore 700 S PIP (M09112A001) Printed Circuit Assembly (PCA)**
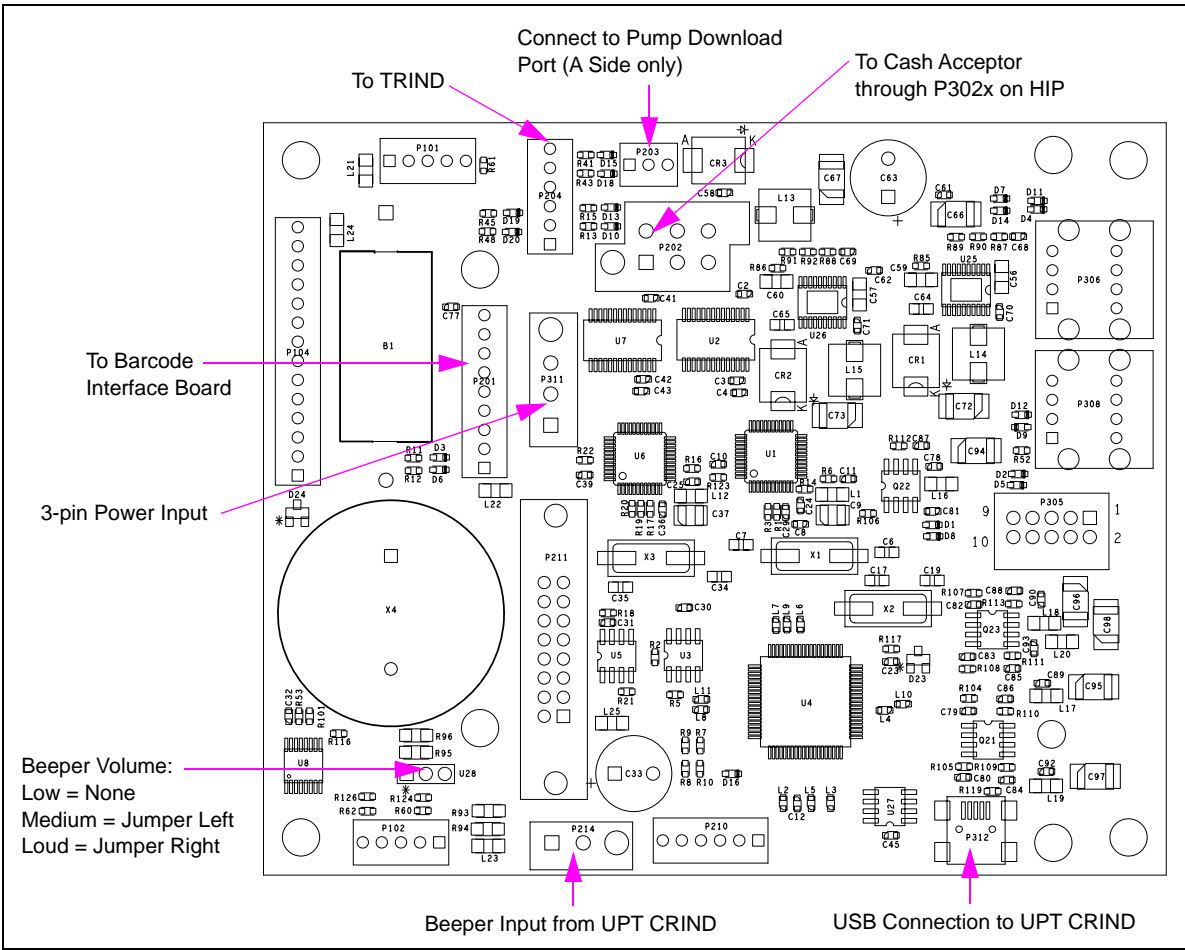
## Board Connections and Cables
The following table lists the connection details:

| Connector# | Via Cable | To Board | At Connector # |
|---|---|---|---|
| P203 | M07970A002 | M01922A003 | P111 (Side A only) |
| P311 | M07974A002 | M09115A001 | P411 |
| P214 | M09266A001 | M09115A001 | P414 |
| P312 | M03695B004 | M09115A001 | P412 |
| P201 | M08010A002 | M10402A001 | J1521 |
| P204 | R20773-G4 | M06143A001 | P182 |
| | | M06143A002 | P182 |
| P202 | M09281A001 | M07895A001 | P302 |
| P306 | M07751A001 | M07713A001 | 5-pin connector |

## LEDs on PIP PCA
The following table lists LED display and the connection details:

| Color | Designation | Description | FlexPay | Generic Color |
|---|---|---|---|---|
| Amber | D1 | FLASH drive over-current | | |
| | D11 | USB port P306A over-current | | |
| | D7 | USB port P306B over-current | | |
| | D2 | USB port P308A over-current | | |
| | D12 | USB port P308B over-current | | |
| Green | D8 | FLASH drive connected | | |
| | D4 | USB port P306A Connected | | |
| | D14 | USB port P306B Connected | | |
| | D9 | USB port P308A Connected | | |
| | D5 | USB port P308B Connected | | |
| | D16 | Hub heartbeat | **Used on Both** | |
| Yellow | D3 | RX on Port 1 | **P201** Barcode Reader | **P101** EPP/SCR Side A |
| | D6 | TX on Port 1 | | |
| | D13 | RX on Port 2 | **P202** Cash Acceptor | **P102** EPP/SCR Side B |
| | D10 | TX on Port 2 | | |
| | D15 | RX on Port 3 | **P203** Connection to pump | |
| | D18 | TX on Port 3 | | |
| | D19 | RX on Port 4 | **P204** TRIND via RS-232 | **P104** TRIND via TTL |
| | D20 | TX on Port 4 | | |

Figure 4-8 shows the beeper interface PCA.

**Figure 4-8: Beeper Interface PCA (M09232A001)**
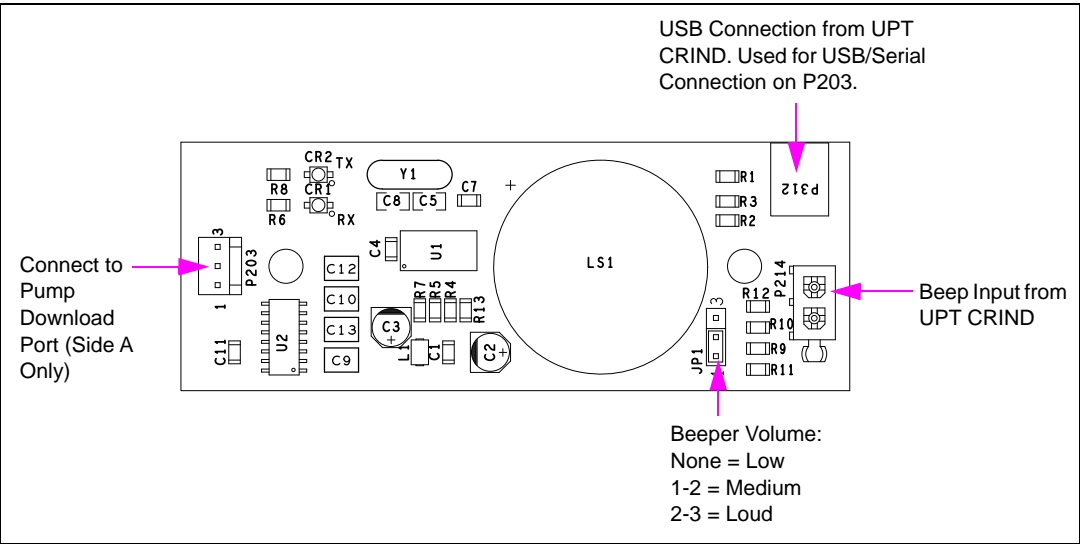


**Board Connections and Cables**

The following table lists the connection details:

| Connector# | Via Cable | To Board | At Connector# |
|---|---|---|---|
| P203 | M07970A002 | M01922A003 | P111 (Side A only) |
| P312 | M03695B004 | M09115A001 | P412 |
| P214 | M09266A001 | M09115A001 | P414 |

**LEDs on Beeper Interface PCA**

The following table lists the LED display details:

| Color | Designation | Description |
|---|---|---|
| Yellow | CR1 | TX to pump |
| | CR2 | RX from pump |

Figure 4-9 shows the HIP interface PCA.

**Figure 4-9: HIP Interface PCA (M07895A001)**
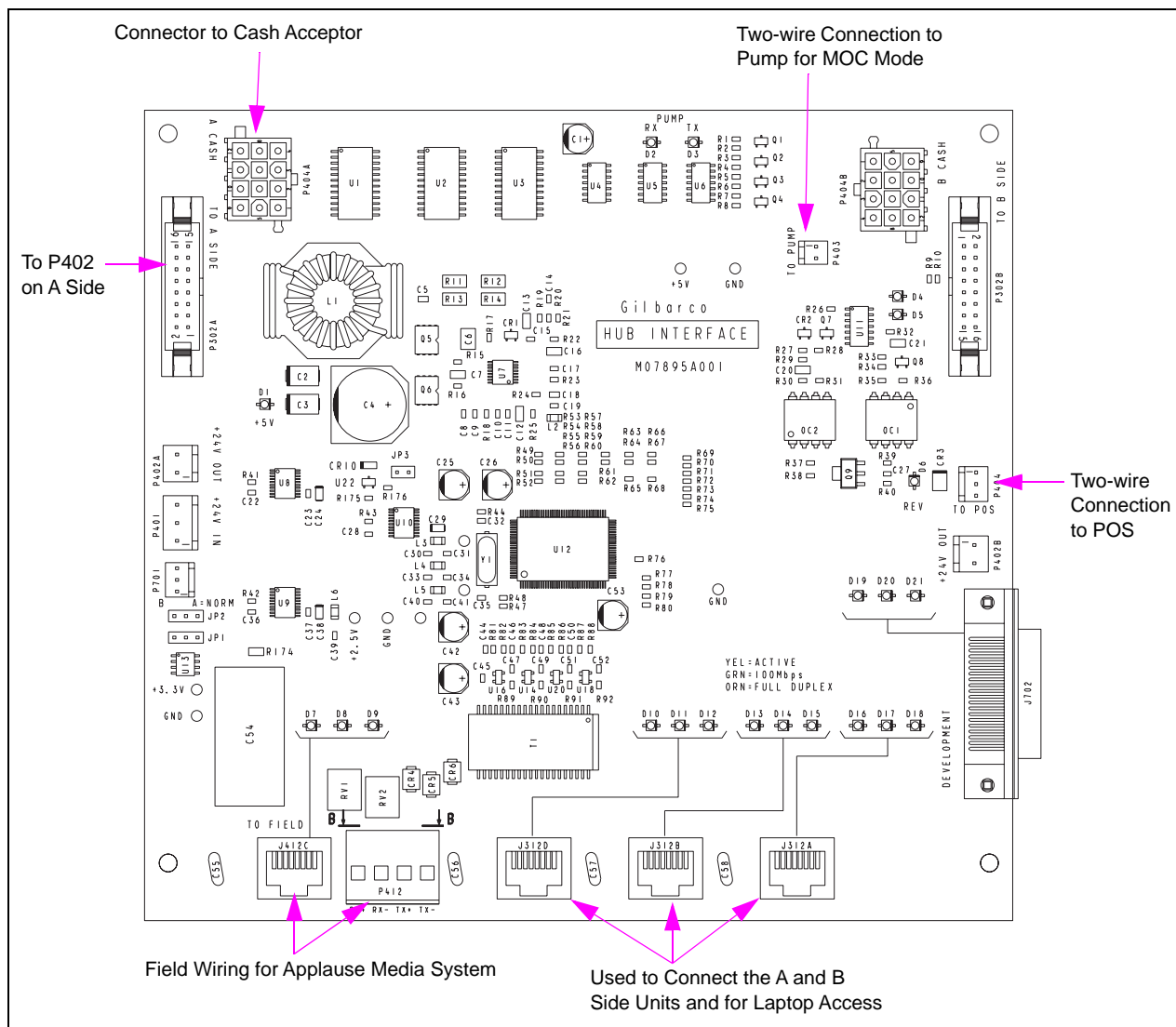
Figure 4-10 shows the HIP 2 interface PCA.

**Figure 4-10: HIP 2 Interface PCA**
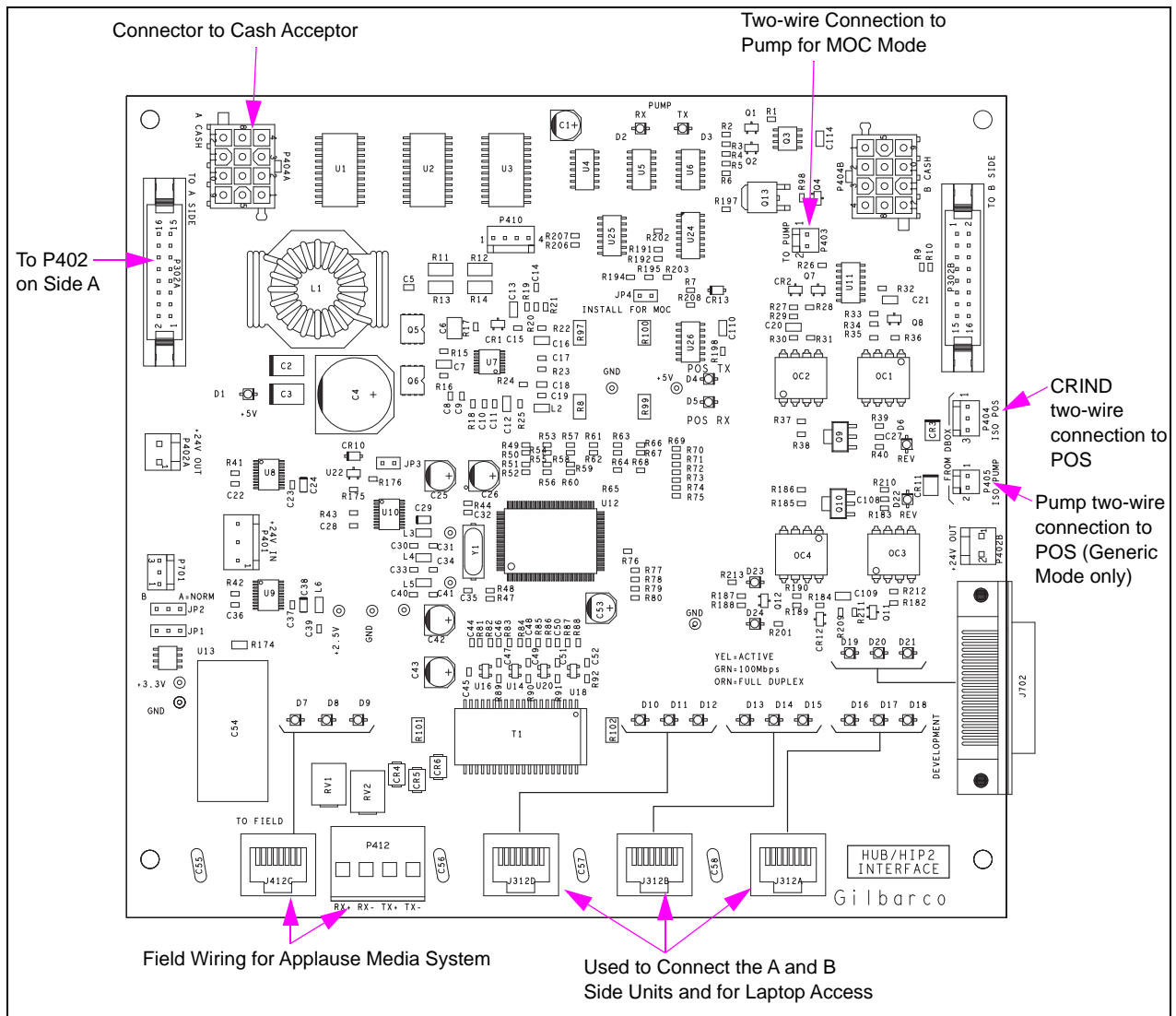
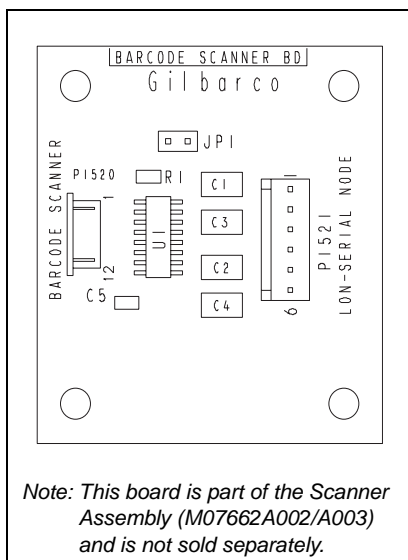### Board Connections and Cables

The following table lists the connection details:

| Connector# | Via Cable | To Board | At Connector# |
|---|---|---|---|
| P302A | M07702A016 | M09115A001 | P402 (Side A only) |
| P302B | M07702A016 | M09115A001 | P402 (Side B only) |
| P403 | - | M01922A003 | J1109 |
| J312A | Q13850-06 | M09115A001 | P503 (Side A only) |
| J312B | Q13850-06 | M09115A001 | P503 (Side B only) |
| J412C | Field Wiring | M01251A001 | P503 |
| P404A | M03184A004 | M01251A201 | P503 (Side A only) |
| P404B | M03184A004 | M01251A201 | P503 (Side B only) |
| P401 | M07648A006 | M09115A001 | J301A J301B |

### LEDs on HIP Interface PCA

The following table lists the LED display details:

| Color | Designation | Description |
|---|---|---|
| Green | D1 | +5 V power |
| Yellow | D2 | RX from pump (MOC mode only, will be on solid for Generic) |
| | D3 | TX to pump (MOC mode only) |
| | D4 | TX to POS |
| | D5 | RX from POS |

### LEDs on HIP 2 Interface PCA

The following table lists the LED display details for HIP 2:

| Color | Designation | Description |
|---|---|---|
| Red | D6 | CRIND two-wire polarity reverse LED |
| | D22 | Pump two-wire polarity reverse LED |
| Yellow | D23 | Pump loop TX to POS (Generic Mode Only) |
| | D24 | Pump loop RX from POS |
| | D4 | CRIND loop TX to POS |
| | D5 | CRIND loop RX from POS |

The following table lists the LED and the connector details:

| Connector # | Yellow - Active | Orange- Full Duplex | Green - 100 Mbps |
|---|---|---|---|
| P412 or J412C | D7 | D8 | D9 |
| J312D | D10 | D11 | D12 |
| J312B | D13 | D14 | D15 |
| J312A | D16 | D17 | D18 |
| Unused | D19 | D20 | D21 |

Figure 4-11 shows the intercom interface PCA.

**Figure 4-11: Intercom Interface PCA (M09751A002)**
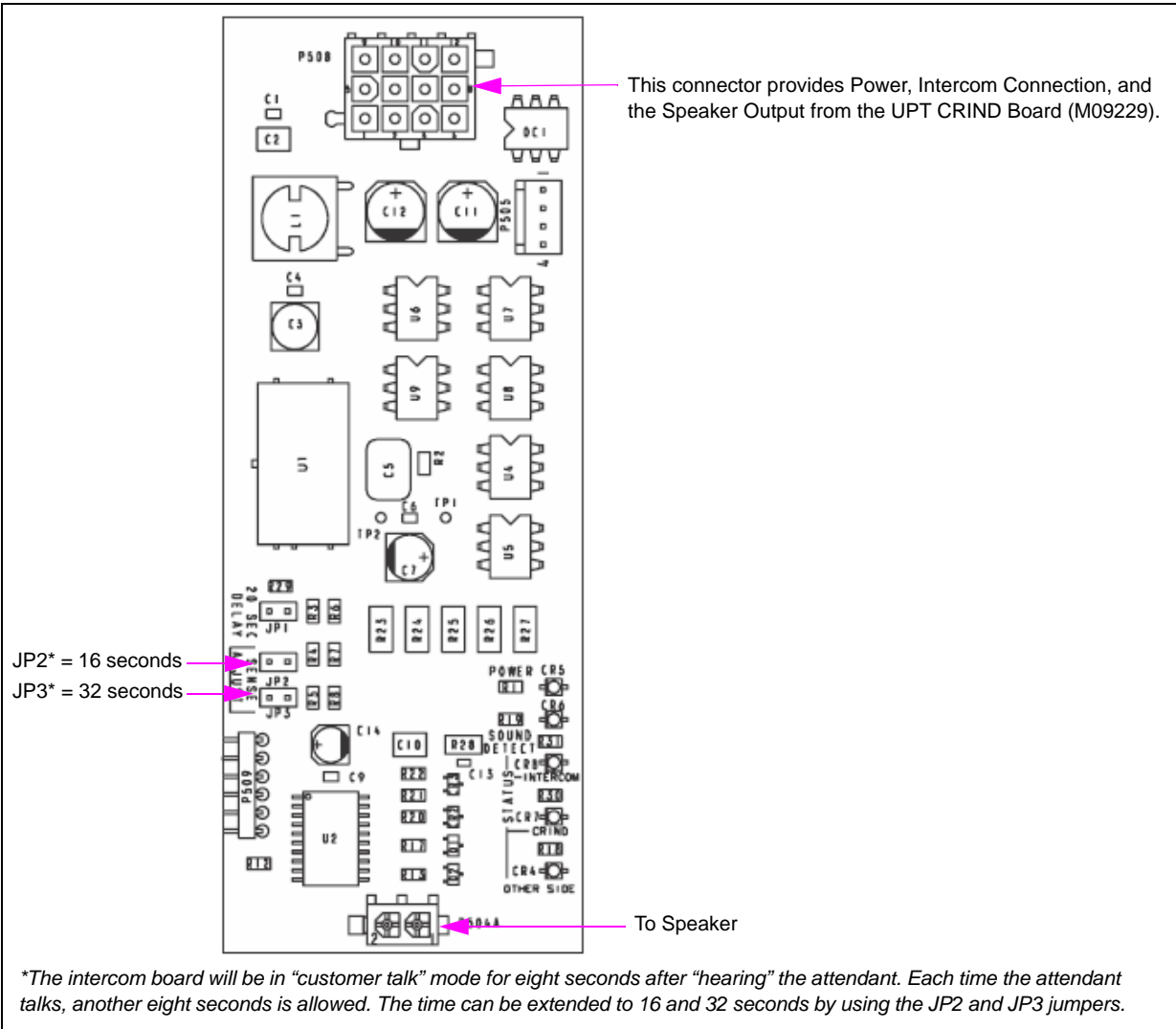


This connector provides Power, Intercom Connection, and the Speaker Output from the UPT CRIND Board (M09229).

JP2* = 16 seconds
JP3* = 32 seconds

To Speaker

*The intercom board will be in "customer talk" mode for eight seconds after "hearing" the attendant. Each time the attendant talks, another eight seconds is allowed. The time can be extended to 16 and 32 seconds by using the JP2 and JP3 jumpers.*

## Board Connections and Cables

The following table lists the connection details:

| Connector# | Via Cable | To Board | At Connector# |
|---|---|---|---|
| P508 | M09259A001 | Speaker Assembly | - |
| P504A | M10590A001 | M09115A001 | J504 |

Figure 4-12 shows the barcode scanner interface PCA.

**Figure 4-12: Barcode Scanner Interface PCA (M10402A001)**



Note: This board is part of the Scanner
        Assembly (M07662A002/A003)
        and is not sold separately.

## Board Connections and Cables

The following table lists the connection details:

| Connector# | Via Cable | To Board | At Connector# |
|---|---|---|---|
| P1520 | M01304B002 | M01304A001 | J1 |
| P1521 | M08010A002 | M09112A001 | P201 |

# FlexPay Control Board [FCB (M11930K001)]

The FCB provides the functions of CRIND device. The FCB houses the secure device that protects credit and debit card PIN information. The FCB is located on the main door directly behind the CRIND display (see Figure 4-13). Do not separate the FCB from its black plastic housing. It will tamper the security and destroy the board. The display jumper (on rear side of FCB) must be set before the installation of the FCB. Set according to the CRIND display size in the unit (see Figure 4-13).

**Figure 4-13: FCB (M09115A001)**
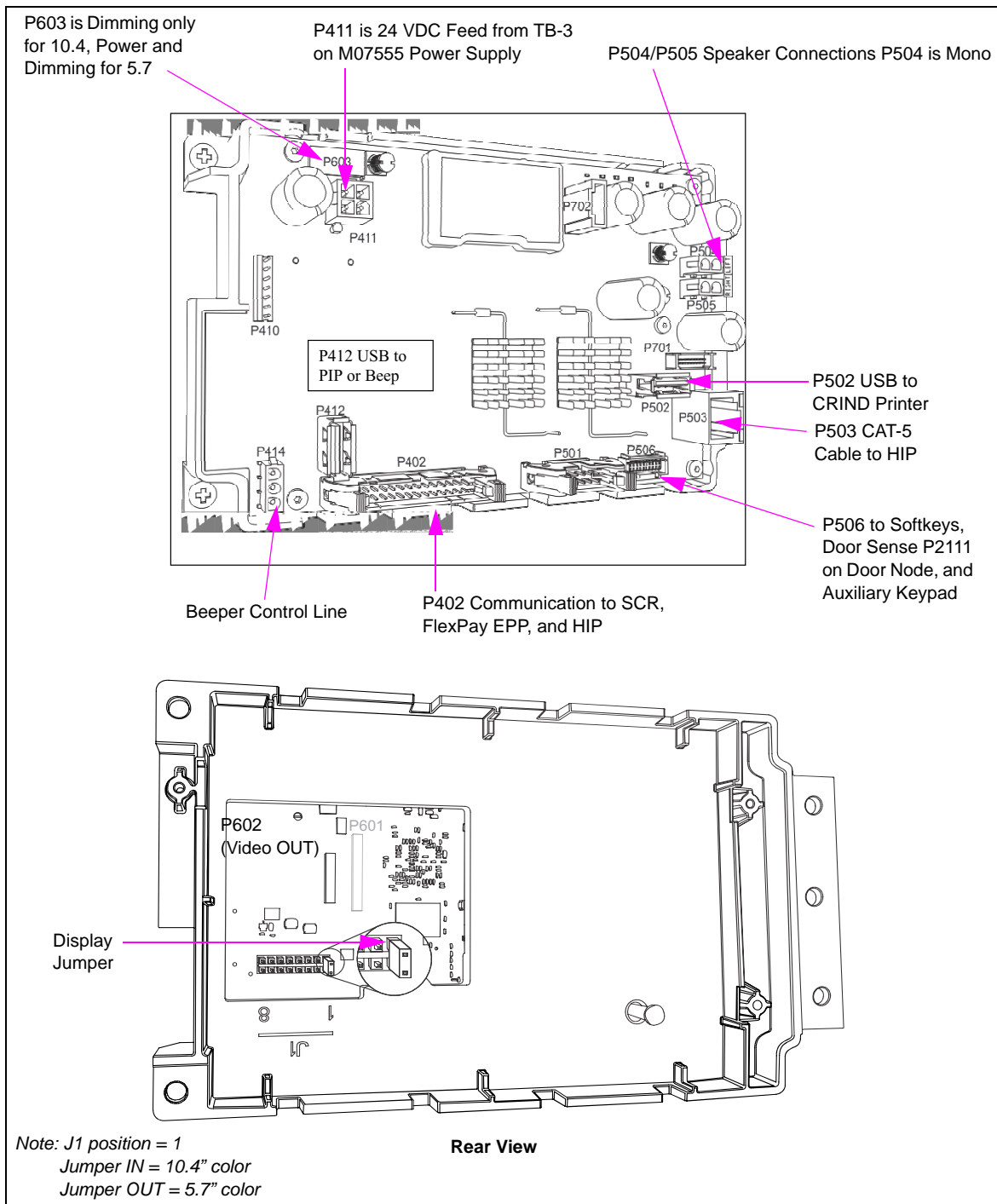
## Board Connections and Cables

The following table lists the connection details:

| Connector# | Via Cable | To Board | At Connector# |
|---|---|---|---|
| P411 | M10453A001 | M07895A001 | J301A, J301B |
| P603 | M10453A001 | M10371A001 | J1 |
| P504 | M09259A001 | - | - |
| P502 | M06745A003 | M04219A001 | - |
| P503 | Q13850-06 | M07895A001 | J312A, J312B |
| P506 | M07957A004 | M10206B001, M10206B002, M08430B002 | - |
| P402 | M07702A016 | M08228B001, M10728B001, M07895A001 | J302A, J302B |
| P414 | M09267A001 | M09112A001, M09232A001 | J214 |

If FCB corrupts, the software recover jumper JP1 allows the FCB to boot from another duplicate base image. Install JP1 to recover the corrupt FCB (see ).

**Figure 4-14: FCB LEDs and Jumper Assignment**
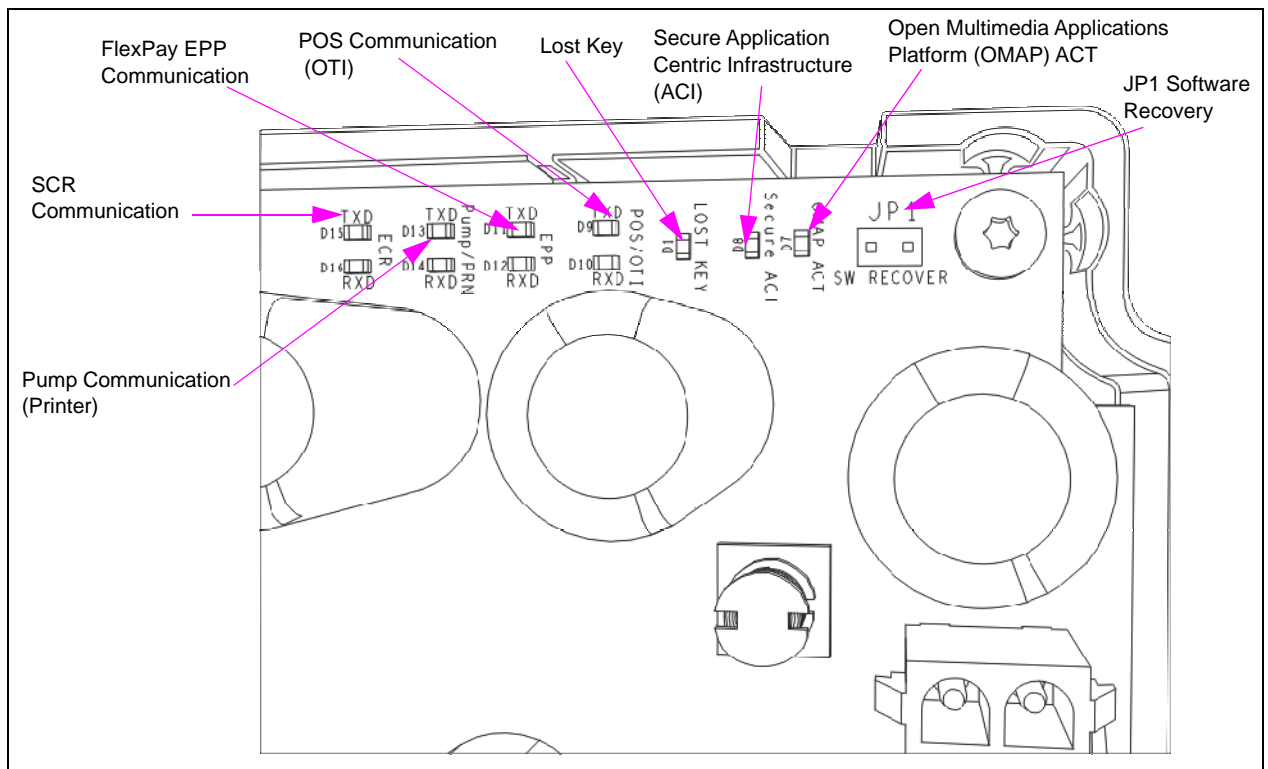
The following table lists the LED/jumper and their functions:

| LED/Jumper | Function |
| --- | --- |
| ECR | The Encrypted Card Reader (ECR) LEDs are active and indicate communication to SCR/ECR. |
| Pump/PRN | The Pump/PRN LEDs indicate communication to the pump node. In Generic Mode, the Pump/PRN LEDs stay in a steady-state (either OFF or ON) and do not blink. The Pump/PRN LEDs continuously blink in MOC mode, after the CRIND device comes up completely. |
| EPP | The EPP LEDs are active and indicate communication to FlexPay EPP. |
| POS/OTI | The POS/OTI LEDs are active and indicate communication to POS through HIP. |
| Lost Key | The Lost Key LEDs are "ON", if the secure key is lost (requires FlexPay CRIND Control Board replacement). Else, the Lost Key LEDs are "OFF". |
| Secure ACT | The Secure ACT LEDs are blinking (normal), blinks at a constant rate. |
| OMAP ACT | The OMAP ACT LEDs are blinking (normal). However, these LEDs may not blink at a constant rate. |
| Recovery Jumper | These jumpers may be used for recovery in some cases when a unit fails catastrophically. *Note: This is a Gilbarco led event. Do not use unless instructed by Gilbarco.* |

# DCM2.2

## DCM2.2 (M15737A001) Highlights

**Figure 4-15: DCM2.2 Board**



J3 HomePlug New Location

JP12 - New SmartCRIND Jumper

JP5 - New Jumper for VLAN (UX410)

JP6 - New Jumper for Pump Current Loop Selection

New - These ports become dedicated for specific devices when VLAN Jumper is installed (printed on the PCB)

P333 - New Connector for Dedicated High-Speed
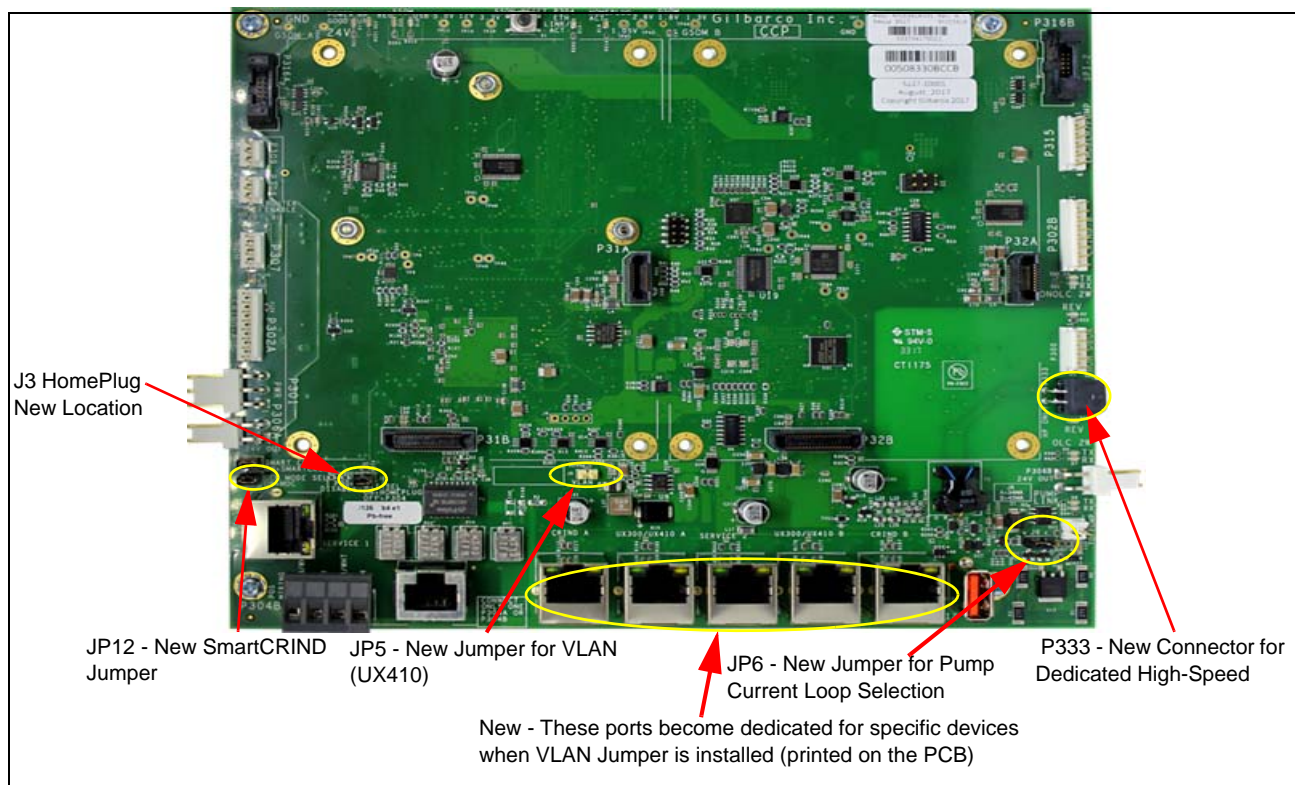
## DCM2.2 LED Functions

The following table lists the LED functions of DCM2.2:

| LED Functions | |
| --- | --- |
| D1 Power Good | VDC 24V is "ON" = Good |
| D23 HP UP | HomePlug jumper is installed "ON" = Good, CPU is running, but does not indicate that there is a connection to the BRCM2.X in back room. Internal CCP status only. |
| D20 SSoM REG | Registered to the cloud |
| D19 SSoM USB | USB port activity LED |
| D13 ETH LINK ACT | Same as DCM2.1 - HomePlug jumper is OFF, P304 direct ethernet connection active |
| D18 HomePlug | HomePlug is active and connected to BRCM2 (2.1 or 2.2) |
| D21 LED "Router Enable" | If "ON Green", SSoM is installed and running, does not mean it is configured properly. If LED is "OFF", the assembly must be replaced. |
| D5 and D6 | New labeling - NON-OLC, monitors P300 pins 1 and 3 |
| D4 and D7 | OLC (new labeling), monitors either P300 pins 4 and 5 or P333 pins 3 and 4 depending on the two-wire configuration |
| D2 | Reversed two-wire |
| D14 | Reversed two-wire |

## DCM2.2 LED Indicators

Check the following LED indicators after DCM2.2 is powered ON:

| Function | Color | Control |
|---|---|---|
| CCP Power_Good LED | Green | Driven when 2.5 V, 3.3 V and 5 V are present |
| HomePlug Power LED | Green | ON: Power ready<br>Flashing: Loading firmware<br>OFF: Power not ready |
| HomePlug Status LED | Green | ON: HomePlug link detected<br>Flashing: TX or RX activity<br>OFF: HomePlug link not detected |
| Two-wire | Orange | Flashing: TX and RX (two-wire) detected<br>ON: RX is solid and TX is OFF if there is an Open connection. Wire is not connected.<br>OFF: No communication. Both TX and RX are OFF |
| SSoM Activity | Green | ON: SSoM is detected<br>Flashing: After SSoM registered |
| Router Enable | Green | ON: When the SSoM is installed and has Cloud connectivity |
| P304 ETH Link/Act | Orange | ON: When we use CAT-5 configuration<br>OFF: When we use HomePlug |

## DCM2.2 Connectors

The following table lists the port numbers and functions of DCM2.2 connectors:

| DCM2.2 Connector | Port Number | Function |
|---|---|---|
| 3-pin MTA .156" | P301 | 24 VDC power input |
| 2-pin MTA .156" | P306A | 24 VDC power output (fused). This is primarily used to power the DCM in Applause Media System. |
| 5-pin MTA .100" | P300 | Two-wire from D-Box [CRIND and Pump (Generic only)]. |
| 2-pin MTA .100" | P303 | Two-wire connection to Pump Control Node (PCN) |
| 8-pin MTA .100" | P302A | RS-232 pump and CRIND to PIP3 A |
| 4-pin | P333 | Dedicated Home Plug |
| 8-pin MTA .100" | P302B | RS-232 pump and CRIND to PIP3 B |
| RJ-45 | P304A/B | Ethernet connection to the back room. P304B is the optional discreet wire connection. |
| | J305C | Ethernet connection to UPM A |
| | J310A | Ethernet connection to UX300 A |
| | J310B | Ethernet connection to UPM B |
| | J303B | Ethernet connection to UX300 B |
| | J303A | Laptop Service port 1 |
| | J310A | Laptop Service port 2 |

## DCM2.2 Jumpers

The following table lists the status and functions of jumpers:

| Connector | ON | OFF | Function |
| --- | --- | --- | --- |
| J3 | X | | High-speed connection active. P304 A/B disabled. |
| | | X | High-speed connection inactive. P304A and P304B connects to Category 5 (CAT-5) running through the conduit for high speed connection (if used). |
| J4 | X | | Unit is connected to a Passport POS MOC |
| | | X | Unit is connected to a third party POS (Generic) |
| J5 | X | | VLAN is enabled (FlexPay II only) |
| | | X | VLAN is disabled |
| J6 | B | | Pump communications. Install the jumper on the B position for the 45 mA Current loop. |

*This page is intentionally left blank.*

# 5 – Activating Encore 700 S CRIND

## Overview

FlexPay units that are activated power up with a blue screen before connecting to the system controller. Units that are not activated automatically power up with a green screen.

A menu option is also available briefly at power up which allows the system to be "Activated".

The activation function is protected by a factory-calculated password that is different for each FlexPay component, as well as for each time the function is accessed on each FlexPay component.

The equipment that calculates the password is kept in a secure environment in a Gilbarco maintenance facility. The process to generate a password is accessible to authorized maintenance technicians only.

The Encore 700 S CRIND to be activated must be securely mounted before commencing the process.

Unbolting an Encore 700 S CRIND keypad/Encore 700 S card reader/Encore 700 S CRIND display from a system that was activated will automatically deactivate the system.

When replacing a FlexPay EPP on an Encore 700 S unit, the FlexPay EPP extracts the mapping and key information from the FCB. However, an activation with Gilbarco is required. For activation, contact Gilbarco Call Center at 1-800-800-7498.

# Configuring/Activating Encore 700 S CRIND

To activate an Encore 700 S CRIND, you must enter the service menu. To enter the Service menu and perform the activation, proceed as follows:

**1** Power up the Encore 700 S CRIND device. The Product Part Number (PPN) is displayed on the screen (see Figure 5-1). Note the 8-digit serial number when the unit first powers up. The right-most six digits of the serial number is the password for the Service Menu.

*Note: The message, "Out of Service" normally appears when the unit first powers up.*

**Figure 5-1: Powering up Encore 700 S CRIND**



The PPN is also printed on the rear of the unit (see Figure 5-2).

**Figure 5-2: PPN on Rear of Encore 700 S CRIND Unit**



Location of PPN
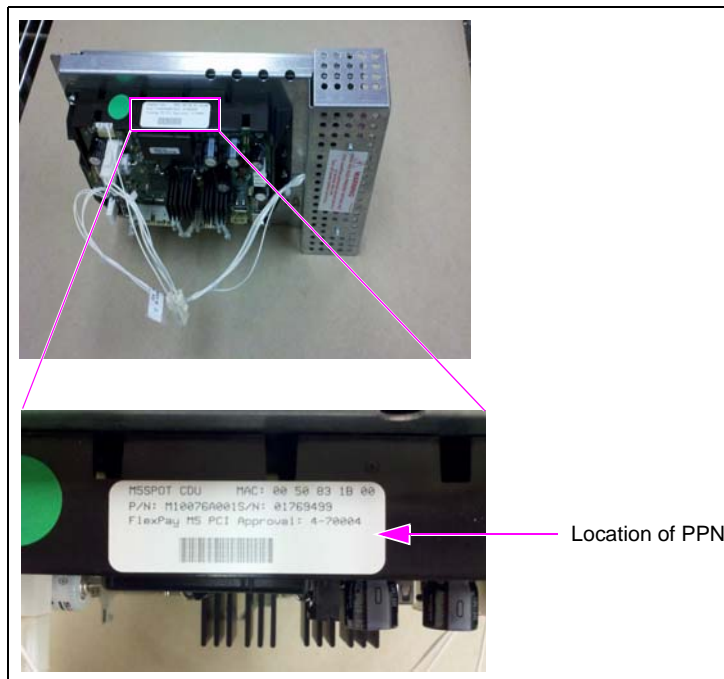
**2** The Service Menu is shown when the Encore 700 S CRIND requires activation (see Figure 5-4). Otherwise, a white screen with the Gilbarco logo and software package versions is displayed momentarily (see Figure 5-3).

**Figure 5-3: Software Packages Screen**



<1> enter setup appears at start-up and also when the FlexPay card reader requires activation.
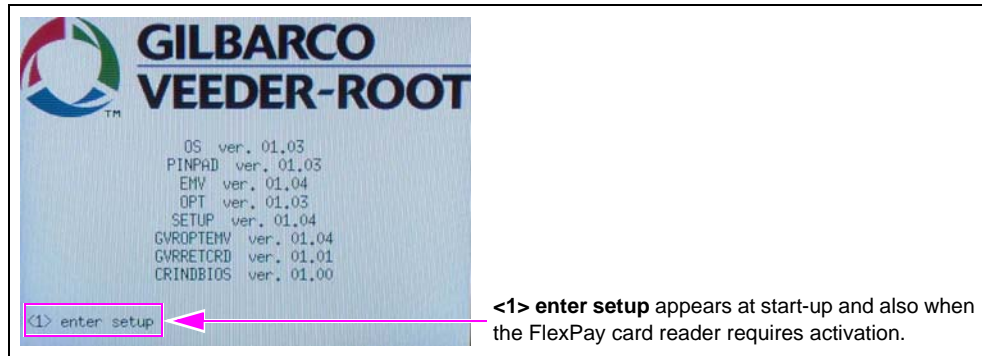
**3** Press **1** > **Enter**. The Service Menu screen appears.

**Figure 5-4: Service Menu - Screen 1**



**4** Enter the right-most six digits of the serial number and press **ENTER/OK**.
The Service Menu - Main Menu is displayed.
*Note: If you do not enter the password within 60 seconds, the unit automatically restarts.*

**Figure 5-5: Service Menu - Main Menu**

The options in the Service Menu are shown in Figure 5-6.

**Figure 5-6: Service Menu Options Tree**
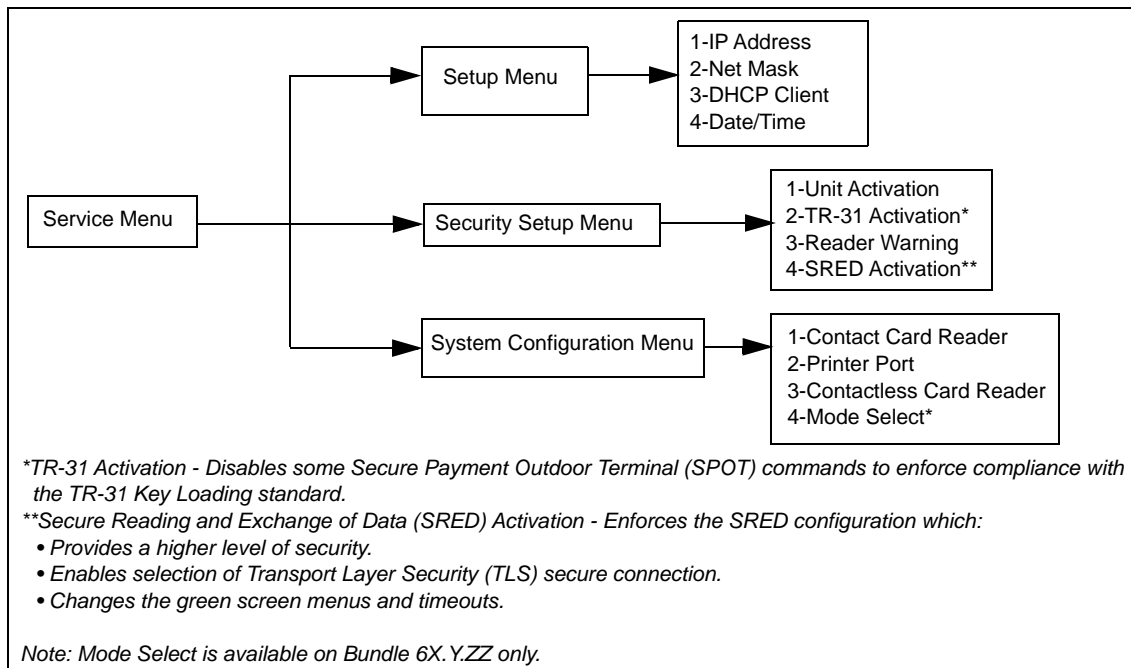


5   Press **2** > **Enter** to enter the Security Setup Menu.

This menu is used to activate security mounting sensors.

The Encore 700 S CRIND software modules are not activated and system communications are not possible until the unit's mounting sensors are activated.

The menu displays the following:
 • UNIT SERIAL NUMBER: PPN shown at start-up.
 • UNIT CHALLENGE NUMBER: Variable code generated when the Encore 700 S CRIND device starts.
 • ENTER MATCHING PASSWORD: Matching password is the answer to the challenge number.
    *Note: Gilbarco Technical Support Center/Service Center creates the MATCHING PASSWORD by a secure process that uses the serial number and challenge number, and produces a unique matching password. It must be entered within a time limit (three minutes) of the challenge number being displayed, else, the screen times out and reverts to the main Service Menu.*

**Figure 5-7: Security Setup Menu - Screen 1**



**6** Provide the unit serial number and challenge number to receive a matching password.
   *Note:  To obtain a password, call the Gilbarco Call Center at 1-800-800-7498 and inform the associate that you have an Encore 700 S CRIND device that requires activation.*

**7** Enter the matching password into the Security Setup Menu and press **OK**. After you enter the password correctly, the system will show the sensors' status and three options.

| Option | Description |
|--------|-------------|
| 1 | UNIT ACTIVATION (to activate the unit) |
| OK | SAVE CHANGES AND EXIT |
| CANCEL | UNDO ALL CHANGES AND EXIT |

**Figure 5-8: Security Setup Menu - Options Screen**

**8** Press **1** > **Enter** to activate the unit. The message, "ALL DISMOUNTING SENSORS ENABLED UNIT ACTIVATED" is displayed.

**Figure 5-9: Activation Screen**
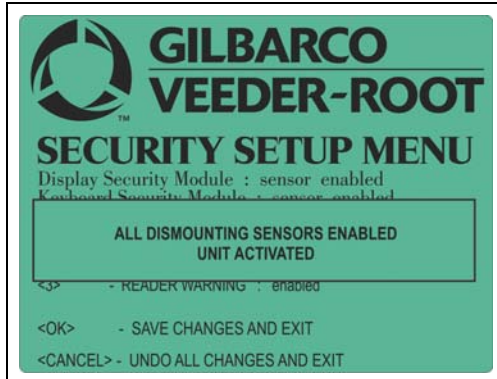


**9** Perform one of the following:
   • Press **OK** to exit the menu.
   • Press **CANCEL** to restart the Encore 700 S CRIND device.

Activation will enable all the connected secure modules.

*Note: It is not possible to enable only one component and retain the other components in an inactive state.*

Contrary to activation, the de-activation procedure does not require keypad entries. Therefore, no options are available in the menu. When the system sensors detect that a module with mounting sensors is dismounted, it automatically self-deactivates. The activation procedure must be repeated.

At each power up, if the Encore 700 S CRIND main processor detects a module that is not activated, it will automatically enter the Service Menu (green screen). For a description of the various diagnostics screens, refer to "Appendix A: Diagnostic Screens" on page A-1.

# Appendix A: Diagnostic Screens

At power up, if you cannot access the Service Menu, one of the following diagnostic messages is displayed on the Encore 700 S CRIND screen.

## Yellow Screen

This indicates that the system has found an active package in its memory and has started to install it. A progress % bar is displayed.

**Figure A-1: Yellow Screen**



## Red Screen

This indicates that alarm(s) is/are running in the module(s). The module that is damaged (or is in alarm status) is not indicated.

**Figure A-2: Red Screen**
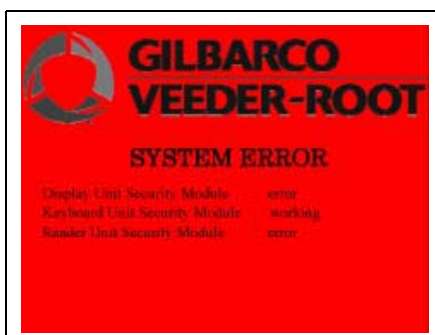
# Blue Screen

This indicates that the system is activated, is running correctly, and is waiting for a master device connection.

**Figure A-3: Blue Screen**
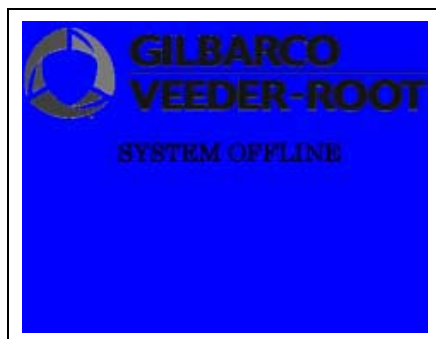


# Green Screen

This indicates that the system is running but has not been activated through the commissioning process. In this situation, the Encore 700 S CRIND will automatically enter the Service Menu.

**Figure A-4: Green Screen**
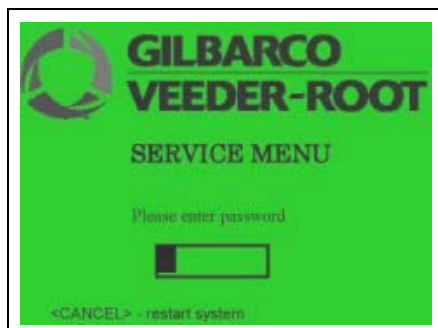
# Appendix B: Troubleshooting Encore 700 S CRIND Communication Issues

## CRIND Communication Problems

| Symptom | Potential Causes | Check/Remedy |
| --- | --- | --- |
| "Lost Key" LED glows on FCB AKA SPOT. | Security compromised or corrupt FCB. | Replace FCB assembly. |
| Does not print and intermittent card reader function on side B. | No communication from side A to side B through CAT-5 cable or wrong CRIND IP settings. | Set proper IP settings and verify CAT-5 Ethernet connection from both FCBs to HIP. |
| CRIND device will not respond to numeric entry on FlexPay EPP while in CRIND diagnostics. | Not pressing **Enter** on FlexPay EPP after numeric entry while in CRIND diagnostics. | Press **Enter** after each numeric entry while in CRIND diagnostics. |
| Cannot hear audio for Applause Media System or intercom. | Speaker not connected or volume set too low. | Verify audio setting in CRIND diagnostics. Start with a setting of "90".<br>Check speaker connections and connections on the intercom board (if applicable). |
| CRIND opposite side does not respond to the POS system. | Opposite side CRIND is not programmed. | Each side has its own CRIND side. They must be programmed individually. |
| No Applause Media System showing up on CRIND device while fueling. | No communication from PCN and CRIND device through the Universal Serial Bus (USB) to Local Operating Network (LON) board. | Check connections at the USB to LON board and then check the wires in the Connectors. The wires not seated in those connectors can cause this problem. The LON to USB board connection does not fail frequently. |
| Green screen at power up. | Requires activation from FlexPay EPP tamper or removal. | Call Gilbarco Technical Assistance Center (TAC) to activate the unit. |
| CRIND device comes up with picture of the FlexPay EPP and X through the FlexPay EPP on the CRIND screen. | Communication error to FlexPay EPP. | Reboot the unit. If the problem persists, check cabling to FlexPay EPP, then replace FlexPay EPP, and reactivate by calling Gilbarco TAC. |
| CRIND logs do not match with proper date and time on CRIND device. | CRIND date and time not set properly. | Set CRIND date and time in CRIND diagnostics. |
| No debit function at the dispenser after a CRIND software upgrade ("GKA" error appears on CRIND display) used with a Passport® POS system. | Lost initialization between the POS and the dispensers. | Reboot the Enhanced Dispenser Hub (EDH) on a Passport system. |
| After getting green screen at power up and attempting to activate, activation fails and screen returns to the first activation entry screen. | Activation Timed-out. | Start process all over again. Time limit to activate the unit is 60 seconds. |
| The CRIND screen does not appear correctly. | Jumper setting is wrong on FCB that selects 10.5 or 5.7-inch display or the jumper is not set properly after the FCB assembly was replaced. | Remove the FCB assembly (including plastic housing) and set the jumper properly. |
| "Keyboard Error" appears at power up and picture of FlexPay EPP with an X through it. | Wrong keypad or defective. | Ensure that the 2.1 keypad is installed. Replace keypad with the correct keypad and reactivate. |
| TRIND is not working. | Software configuration. | Ensure that the TRIND option is enabled in diagnostics and at the POS system. |

| Symptom | Potential Causes | Check/Remedy |
|---|---|---|
| SCR not responding. | Card reader, cabling, and POS system. | Check "ECR" LEDs are on SPP (both TX and RX must be flashing). If ECR LEDs flashing, then try swiping a credit or debit card to ensure that the condition still exists. If there is no response from credit or debit card, then try entering CRIND diagnostics (ensure that the dispenser door is closed to avoid optical sensor issues); this determines whether ECR is not working or Ruby is not processing card events. Restart the unit and collect the logs if instructed by engineering. |
| CRIND display Blank. | CRIND corrupt. | Restart the unit and report to Gilbarco on call closing. |
| Not printing receipts. | - | Run a transaction to determine if receipts are not printing. If there is no transaction receipt, then remove and re-feed paper, and see if the large "1" prints on re-feed. If the large "1" does not print, then the CRIND BIOS is unable to use the printer. Check for network connectivity issues between the FCBs (Ethernet cable, IP addresses). Collect the logs if instructed by engineering. Restart the unit and report to Gilbarco on call closing. |
| Not responding to the CRIND diagnostic card. | No communication for CRIND to pump in the MOC Mode. | Repair the two-wire link from CRIND to pump, verify the proper pump IDs set (7, 11) and so on. Try to enter the CRIND Diagnostics when the CRIND is booting up from a power cycle during the "system online" or "Gilbarco Veeder-Root®" screen. |
| For the third-party POS systems, the CRIND screen does not indicate any occurrence of a POS application download. | The CRIND software displays the existing screen for the first few minutes (for example, the software displays "please pay inside.") on the CRIND display during a POS application download. | Allow sufficient time for the POS application download to occur. Observe the POS communication LEDs on the FlexPay CRIND Control Board on both sides of the unit. TX and RX must glow to indicate a POS application download. For LED descriptions, refer to this manual. |
| The third-party POS application download fails. | Wrong configuration in the third-party POS application. | Verify that the third-party POS system is programmed 5.7-inch monochrome even though the units are 10.4-inch color screen. Verify if the POS system is set to the primary CRIND on both sides of the dispenser as the CRIND devices on each side are independent. |
| No debit (cursor not displayed when prompted to enter PIN). | No customer key loaded in unit. | Remote Key Loading (RKL) unit through FlexPay Maintenance Tool and TAC. For more information, refer to *MDE-5062 FlexPay Maintenance Tool for FlexPay/SPOT CRIND System*. |
| CRIND Screen stuck in "starting application" | | Check connections P303 on DCM2.2 and P1109 on the PCN. Verify that the jumper at J6 is set to position B, 45 mA. |
| Screen Stuck at "Dispenser Unavailable" on SmartCRIND unit | | Verify that Jumper (J12) is installed on the SmartCRIND. |
| Intermittent POS communication to dispensers | | When using a dedicated two-wire connection for Applause Media System/Insite360, ensure thatMOC POS - the two-wire connects to P333 pins 3/4 Generic POS - CRIND to P300 pins 1/3 and Pump to pins P333 pins 3/4. *Note: Applause/Insite360 Encore connects to P333 pins 1/2 (see two-wire configuration in "Block diagram for DCM2.2 Two-Wire Configuration (Dedicated)" on page 4-4 and Launch Bulletin).* |
| Contactless Card Reader (UX410) not functioning | | Ensure that the VLAN Jumper (J5) is installed in FlexPay II unit only and card readers are connected to the proper RJ45 port. |
| No HomePlug communication | | J3 not installed; check the HomePlug Activity LED (D18) should go solid ON when internal HomePlug is established. This does not indicate a connection to the back room. |
| Screen Stuck on message "Pump Closed" and/or "Out of Service" | | Check connections P303 on DCM2.2 and P1109 on PCN. Verify that Jumper J6 is set to position B 45 mA. |

| Symptom | Potential Causes | Check/Remedy |
|---|---|---|
| Insite360 Encore not receiving any incremental logs from PCN, and PCN will not respond to remote commands such as PCN reset during a feature test. | | Verify that the Z-Modem cable is connected at P315 and on P1111 at the PCN (excludes E300 and Advantage). |
| Device is offline in Insite360 Encore | | Check Router Enabled D21 LED. If "ON Green", SSoM is installed and running; does not mean it is configured properly. If LED is OFF, replace the assembly.<br>Check SSoM WebApp configuration.<br>Ping the SSOMs internal IP address using Laptop Service port.<br>Check SSoM software version if connected to FlexPay IV. If at 1.3.13, SSoM will need to be upgraded to latest version. Call the Gilbarco Help Desk. |
| CRIND showing down in the Insite360 Encore | | Check the CAT5 cable connections from DCM2.2 and ping the CRIND IP Addresses using laptop service port. SSoM WebApp might be misconfigured. |
| Error found during SSoM Registration | | Perform "Check Internet" test in SSoM webapp.<br>Verify the SSoM configuration.<br>Check physical connections to internal devices and back room hardware. |
| Router Enabled LED ON and SSoM Registration LED blinking but still device showing offline in Insite360 | | Reboot the dispenser manually. |
| Insite360 Encore is not able to perform remote warmstart feature | | Verify that the Z-Modem cable is connected at P315 and on P1111 at the PCN.<br>Ensure that the PCN is at minimum version.<br>Ensure that the correct power supply cable (M07973A006) is installed.<br>Ensure that the power supply meets minimum requirements. |
| Z-Modem showing Down status in the Insite360 Encore | | Verify that the Z-Modem cable is connected at P315 and on P1111 at the PCN. |
| Two-wire showing Down status in the Insite360 Encore | | Check connections P303 on DCM2.2 and P1109 on PCN.<br>Verify that Jumper J6 is set to 45 mA. |
| Screen Stuck at the Card Reader Error Symbol on FlexPay IV | | Check CAT5 connections on DCM2.2 and at the card reader.<br>Check for dismouted card reader and tamper event.<br>Ping card reader from laptop service port. |

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# Appendix C: Encore 700 S Start-up Checklist

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| **IMPORTANT INFORMATION** |
| :--- |
| • Press **Enter** after each character (for example, for CRIND ID 10, press **1** > **Enter**, **0** > **Enter**, and **Enter**). <br> • If the card reader is not responding, close the main doors to eliminate any outside light intrusion. |

## Diagnostics Mode

☐ Program CRIND Mode and CRIND IDs.

☐ Ensure that all CRIND keys function correctly (including softkeys and auxiliary keypad).

☐ Set the audio level.

☐ Set the personality screen.

☐ Set the unit IP addresses, if non-default values.

☐ Enable any options present on the CRIND.

☐ Run System Health Report (press **Clear** and swipe the CRIND diagnostic card, verify the settings, and ensure that the pump and door node versions are displayed).

☐ Verify the cash acceptor alarm switches and activate door alarms.

☐ Test video/audio (if customers have an Applause Media System).

## Visual Checks and Transactions

☐ Ensure that no wires are trapped in hinges, gaskets, or visible from the exterior of the pump.

☐ Perform a CRIND transaction (both credit and debit).

☐ Ensure that the Applause Media is present during a transaction.

☐ Ensure that the CRIND LEDs are functioning correctly.

☐ Ensure that the CPE/LRE (turtle) is powered up and operational (if applicable for Applause Media System).

☐ Verify that the ADA functions correctly (if present).

☐ Verify that the auxiliary keypad functions properly.

☐ Verify proper communication with the POS.

☐ Ensure that the CRIND prompting on the display, graphic quality, Applause Media System content are present (if applicable).

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☐ TRIND: Verify the response obtained with handheld transponder tester.
*Note:  Verify that in Encore 300/500 (square bezel) NGP retrofit applications,
"Enable Wireless Sync Option" is set to "Enabled". Without this option
enabled, TRIND units can interfere with each other. For more information,
refer to "Appendix E: FlexPay II CRIND Retrofit TRIND Settings"
on page E-1.*

☐ Power cycle the unit and verify that the unit is functioning correctly after warmstart.

# Appendix D: Encore 700 S Recommended Spare Parts

The following table lists the recommended spare parts for Encore 700 S:

| Part Description | Part Number | ASC 100 | Distributor 100 | Distributor 500 |
|---|---|---|---|---|
| FCB in Plastic Housing | M11930K001 | 1 | 1 | 2 |
| Beeper Interface Board | M09232A001 | 1 | 2 | 3 |
| Display, Color 5.7" (display only) | M10369B001 | 1 | 1 | 2 |
| Display, Color 10.4" (display only) | M10370B001 | 1 | 1 | 2 |
| Inverter Board for 10.4" Display Backlight | M10371A001 | 2 | 4 | 6 |
| Scanner Interface Board | M10402A001 | 1 | 2 | 4 |
| Intercom Interface Board | M09751A002 | 1 | 2 | 4 |
| Right Softkey (10.4") | M10206B001 | 2 | 4 | 8 |
| Left Softkey (10.4") | M10206B002 | 2 | 4 | 8 |
| Replacement Backlight Bulbs for Color Display (four bulb set - this covers one display) | M10370B002 | 2 | 2 | 8 |
| 5.7" Color Complete Assembly | M09193A002 | - | - | - |
| 10.4" Color Display Complete Assembly | M10076A001 | - | - | - |
| Replacement Pin for 10.4 Bracket | M12234B001 | 1 | 1 | 2 |
| USB to LON Interface Board (used for Applause Media Systems) | M07713A001 | 1 | 1 | 2 |
| PIP Board | M12806A001 | 1 | 2 | 2 |
| HIP 2 Board | M12760A001 | 1 | 2 | 4 |
| FlexPay EPP 2.0 | M10661B001 | 2 | 2 | 4 |
| Heater Kit Option for FlexPay EPP | M08631K001 | 1 | 2 | 2 |
| SCR 2.0 | M10728B001 | 2 | 4 | 4 |
| Same Standard USB Printer | M04219A001 | 2 | 4 | 4 |
| Same Standard USB Printer | M04219A001 | 2 | 4 | 4 |

*Note: 5.7-inch color softkeys are the same as the latest 5.7-inch monochrome screen softkeys.*

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# Appendix E: FlexPay II CRIND Retrofit TRIND Settings

The TRIND utilizes a Gateway PCA (T20678-G3) to route the traffic of microreader communication with overlapping read fields prior to installation of the FlexPay II Retrofit Kit.

Following the installation of FlexPay II Retrofit Kits:
- The Encore 700/FlexPay II CRIND does not utilize the T20678-GX gateway PCA, but requires an additional programming of Encore 700 CRIND to ensure proper operation at instances when the read fields overlap.
- The TRIND may read tags erratically if the CRIND BIOS configuration is not correct.

*Note: The Encore S E-CIM/700 S utilize the Light and Inductor Assembly (M06143A00X) and do not require this setting changed as the read fields do not overlap except in lab simulators.*

For proper operation of TRIND, the "Enable Wireless Sync Option" must be enabled. To enable the option, proceed as follows:

1  Enter CRIND Diagnostics by swiping the CRIND diagnostics card.

2  Press **1** and **Enter** to access the Main Menu.

3  Press **2** and **Enter** to access the Device Config Menu.

4  Press **4** and **Enter** to access the TRIND Menu.

5  Verify that option 3 shows "Enable Wireless Sync Option". (If "Disable Wireless Sync Option" is shown, then the option is already enabled and no further action is necessary.).

6  Press **3** and **Enter** to enable the Enable Wireless Sync Option.

7  Press **Enter** to continue.

   *Note: Ignore the message stating that this option should only be enabled for lab simulators.*

8  Verify that option 3 now shows "Disable Wireless Sync Option".

9  Press **Cancel** four times then press **2** and **Enter** to exit diagnostics.

10  Perform the same operation on the opposite side of the unit.

11  Test the TRINDs on both sides to confirm proper operation.

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