



FedEx Islander PLUS FMS

Installation 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

Gasboy, Greensboro, is an ISO 9001:2000 registered facility.

Underwriters Laboratories (UL):

UL File#	Products listed with UL
MH4314	All dispensers and self-contained pumping units
MH10581	Key control unit, Model GKE-B Series Card reader terminals, Models 1000, 1000P Site Controller, Model 2000S CFN Series Data entry terminals, Model TPK-900 Series Fuel Point Reader System

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 Compliance (CoC):

Gasboy 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 #	CoC#	Product	Model #
95-179	Dispenser	9100 Retail Series, 8700 Series, 9700 Series	91-019	Dispenser	9100 Commercial Series	05-002	Atlas	8700K, 8800K, 9100K, 9200K, 9800K
95-136	Dispenser	9800 Series	91-057	Controller	1000 Series FMS, 2000S-CFN Series			

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1 – Introduction

Purpose

This manual provides instructions for installing the FedEx Islander PLUS Fuel Management System (FMS) in the off-site server.

Intended Users

This manual is intended for facility personnel (Operations Manager) who installs the FedEx Islander PLUS FMS.

Required Equipment

IMPORTANT INFORMATION
Verify that you have all the required equipment and software to complete the installation.

Following equipment is required to install the FedEx Islander PLUS FMS:

- FedEx Custom Islander PLUS FMS (PA039400801FX)
- Contents of the FedEx project folder from <ftp.gilbarco.com>:
 - Board Support Package (BSP) - Version 1.08 Service Pack 8
 - SiteOmat - Version 6.4.33.098
 - Payment Application Interface Service (PAIS) - 4.31.1.58

Note: To report any missing or damaged equipment, contact Bob Griffith at 1-336-547-5654.

Abbreviations and Acronyms

Term	Description
BIR	Business Inventory Reconciliation
BSP	Board Support Package
DEF	Diesel Exhaust Fluid
DNS	Domain Name System
FHO	Fleet Head Office
FMS	Fuel Management System
GW	Gateway
HOCOMM	Head Office Communicator
LAN	Local Area Network
OrCU	Orpak Controller Unit
OrPT	Orpak Payment Terminal
OS	Operating System
PAIS	Payment Application Interface Service
POE	Power Over Ethernet
STP	Submersible Turbine Pump
WAN	Wide Area Network
W&M	Weights & Measures

2 – Important Safety Information

Note: 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 a Gilbarco Authorized Service Contractor or call the Gilbarco Support Center at 1-800-800-7498. 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.

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.

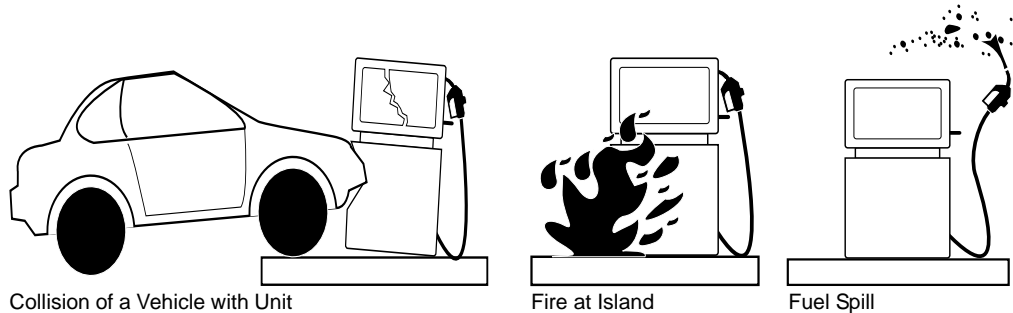
Lockout/Tagout

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.

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:



- 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.

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3 – Installation Procedure

Before You Begin

Use the following checklist to verify you have all the required equipment to complete the installation.

Pre-installation Power Inspection

Installation and reliability issues during the initial roll out of the FedEx project have revealed a high number of sites with electrical issues, excessive noise, due to improper system and panel grounding, and other issues. These issues have made it necessary to verify the quality of the AC power at the island before removing the existing equipment and checking again post installation to verify no issues have been introduced during the installation process.

These checks/tests are simple to complete and must not add more than 10-15 minutes to the entire installation.

Following checks/tests pre-install are designed to identify additional work required, not currently part of the installation scope.

- 1 Verify that the AC Power for the Islander PLUS System comes from a separate, dedicated circuit breaker. No other equipment must be powered from this breaker. The system's pumps or dispensers must not be on this breaker. Power for the system must be 115 VAC + 10%, 47-63 HZ. The system draws 135 watts maximum.



WARNING

AC power is present on the Terminal Blocks in the pedestal. Electrical shock may occur if the operator comes in contact with these connections.

- 2 Locate the SYSTEM POWER Terminal Block in the pedestal on the existing system. Use a digital AC voltmeter to measure the following voltages.

Hot to Neutral measured at: _____ (fill in value) measured by: _____ (print name)

This voltage must be 115 VAC + 10% (104 VAC to 126 VAC).

Hot to Ground measured at: _____ (fill in value) measured by: _____ (print name)

This voltage must be 115 VAC + 10% (104 VAC to 126 VAC).

Neutral to Ground measured at: _____ (fill in value) measured by: _____ (print name)

This voltage must be 0 VAC + 500 millivolts (-500 mV to 500 mV).

Note: If power is not within these specifications, correct it before continuing.

- 3 Put ALL PUMPS into manual override and activate the pumps [ensure Submersible Turbine Pumps (STPs)/pumping units are ON]. Use a digital AC voltmeter to measure the following voltages.

Hot to Neutral measured at: _____ (fill in value) measured by: _____ (print name)

This voltage must be 115 VAC + 10% (104 VAC to 126 VAC).

Hot to Ground measured at: _____ (fill in value) measured by: _____ (print name)

This voltage must be 115 VAC + 10% (104 VAC to 126 VAC).

Neutral to Ground measured at: _____ (fill in value) measured by: _____ (print name)

This voltage must be 0 VAC + 500 millivolts (-500 mV to 500 mV).

Note: If power is not within these specifications, correct it before continuing.

IMPORTANT INFORMATION

If any readings are **NOT** within the acceptable ranges, then **STOP**. For further instructions, call Gasboy TAC at 1-800-444-5529.

- 4 Grounding Method: Proper system grounding is an extremely important part of the system installation. Grounds for all system devices must be wired to the breaker panel ground bus bar which, in turn, must be grounded to a ground rod. A conduit ground does not provide a sufficient ground. It is recommended that the neutral and ground bus bars be bonded together unless prohibited by local codes.

Pre-installation Checklist

Following pre-installation checklist is designed to ensure proper installation:



WARNING

DO NOT remove existing system before verifying that there are NO BARRIERS to complete the Islander PLUS installation.
If issues are found, call Bob Griffith at 336-547-5654 IMMEDIATELY to discuss options.

Description	Checkbox
Check that you have the correct Gasboy Supplied parts: <ul style="list-style-type: none">• PA093400810FX - Islander PLUS FedEx CUSTOM.• Stage 2 FedEx Islander PLUS Install Guide.	<input type="checkbox"/>
Check the conduit layout, and ensure you have the proper supplies and clearances to complete the installation.	<input type="checkbox"/>
Check all fueling positions for proper operation.	<input type="checkbox"/>
Check all hose reels for proper operation - All hose reels connected to the existing system MUST be connected and controlled by the Gasboy Fleet PLUS system.	<input type="checkbox"/>
Check the E-STOP system for proper operation.	<input type="checkbox"/>
Find the circuit controlling the current FMS. Verify this is a dedicated circuit.	<input type="checkbox"/>
Trace and identify control wires in the existing system.	<input type="checkbox"/>
Know the function of the control wires.	<input type="checkbox"/>
Identify and label the handle switch (in-use), if available.	<input type="checkbox"/>
Identify and label the (line/load) or authorize wires.	<input type="checkbox"/>
Identify and label the pulser wires.	<input type="checkbox"/>
Identify and label the LAN/WAN connections.	<input type="checkbox"/>
Mark all control wires for use when installing the Islander PLUS system.	<input type="checkbox"/>

Shutting Down Island

IMPORTANT INFORMATION

For issues locating the FedEx Fleet Manager, contact Travis Langston at 1-870-704-5230.

Ensure that the facility personnel (Operations Manager) is aware of these steps before the old equipment is removed. Name and contact information for the Operations Manager and site installation parameters will be sent to you by Bob Griffith (1-336-547-5654).

FedEx Project Site Information Form, includes the following [for an example, refer to “[FedEx Project Site Information Form \(Example Only\)](#)” on [page C-1](#)]:

- Operations Manager’s Name and Phone Number.
- Fipay Server IP Address, Subnet Mask, and Gateway IP Address.
- SiteOmat Wide Area Network [WAN Local Area Network (LAN2)] IP Address, Subnet Mask, and Gateway IP Address.
- FedEx Alpha code - SiteOmat Station Name or Description.
- Site Number - SiteOmat Station Code.

CAUTION

The circuit panel must be locked out, tagged out as per normal Gilbarco® safety procedures found in the Gilbarco LMS training module <http://wise.gilbarco.com>. For more information, refer to GVRSAFEUS50-012 GVR Fueling Site Safety.

Removing Existing Equipment

The Gasboy Fleet PLUS system will use some of the same control and communication wiring as other third-party FMS. To aid in efficient installation, all control wiring in an existing system must be labeled before disconnection.

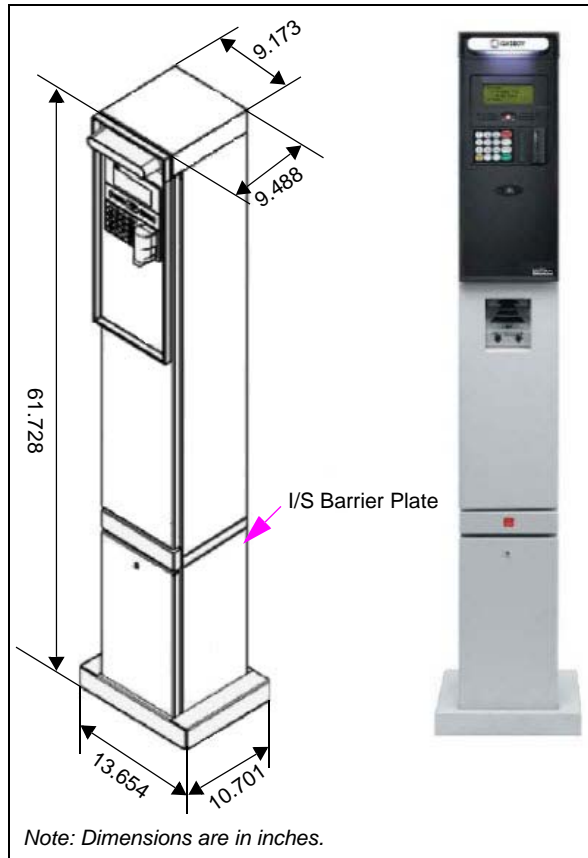
Mounting Dry Islander PLUS

To mount the Islander PLUS in the facility, proceed as follows:

- 1 When installing the Gasboy Islander PLUS at a facility with existing conduits at the fuel island, it is important to note the dimensions of the pedestal to determine if special fabrication is required for the conduits (see [Figure 3-1](#) on [page 4](#)).
- 2 The pedestal can be cut within UL parameters from the base plate up to 18 inches. Any holes drilled in the pedestal must only be large enough to fit conduit elbows and must not be inserted above the IS Barrier Plate.
- 3 Following conduits are required for the Gasboy Islander PLUS pedestal:
 - High Voltage (AC power, pump control, ground, in-use for mechanical dispensers).
 - Low Voltage (pulser, tank gauge, and LAN).

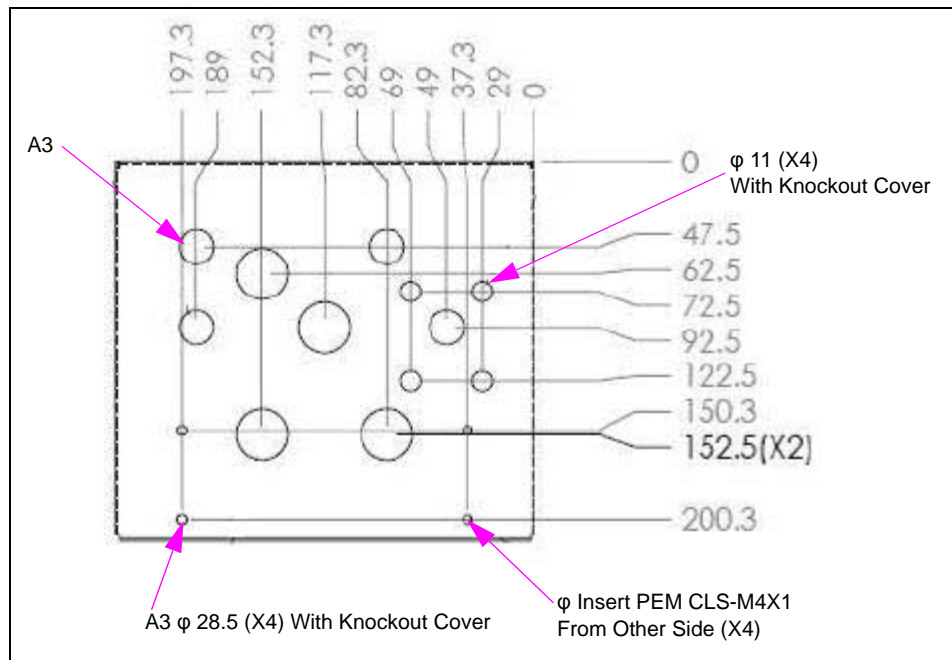
- 4 Depending on the installation, you may need to modify the existing conduit wiring to accommodate the required feeds.

Figure 3-1: Installing Gasboy Islander PLUS



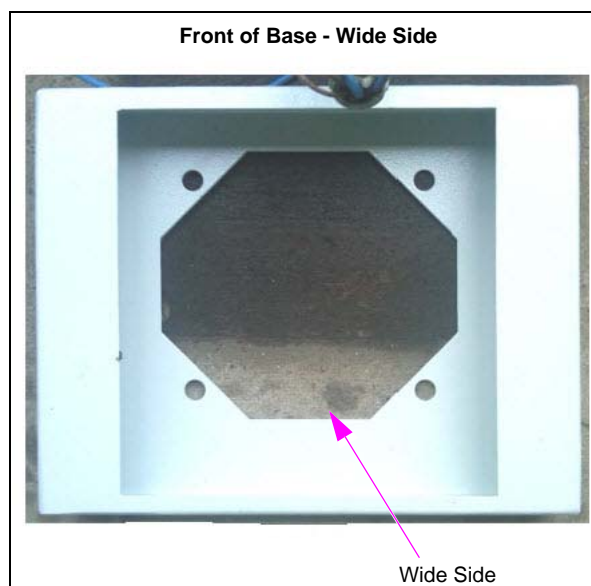
- 5 Make a template of the conduit configuration for the cutouts in the barrier plate. The cutouts in the plate must only be cut large enough for the wiring to be pulled through. You will also want to install conduit gaskets to prevent wire damage (see [Figure 3-2](#)).

Figure 3-2: Conduit Configuration in Barrier Plate



- 6 After the pedestal and conduit needs are addressed, place the base plate over the conduits, wider side faced towards the front of the unit, and mark the island along the outside edge of the base plate as well as the inside holes for the lag bolt placement (see [Figure 3-3](#)).

Figure 3-3: Base Plate on Conduits



Installing FedEx Islander PLUS FMS

To install the FedEx Islander PLUS FMS, proceed as follows:

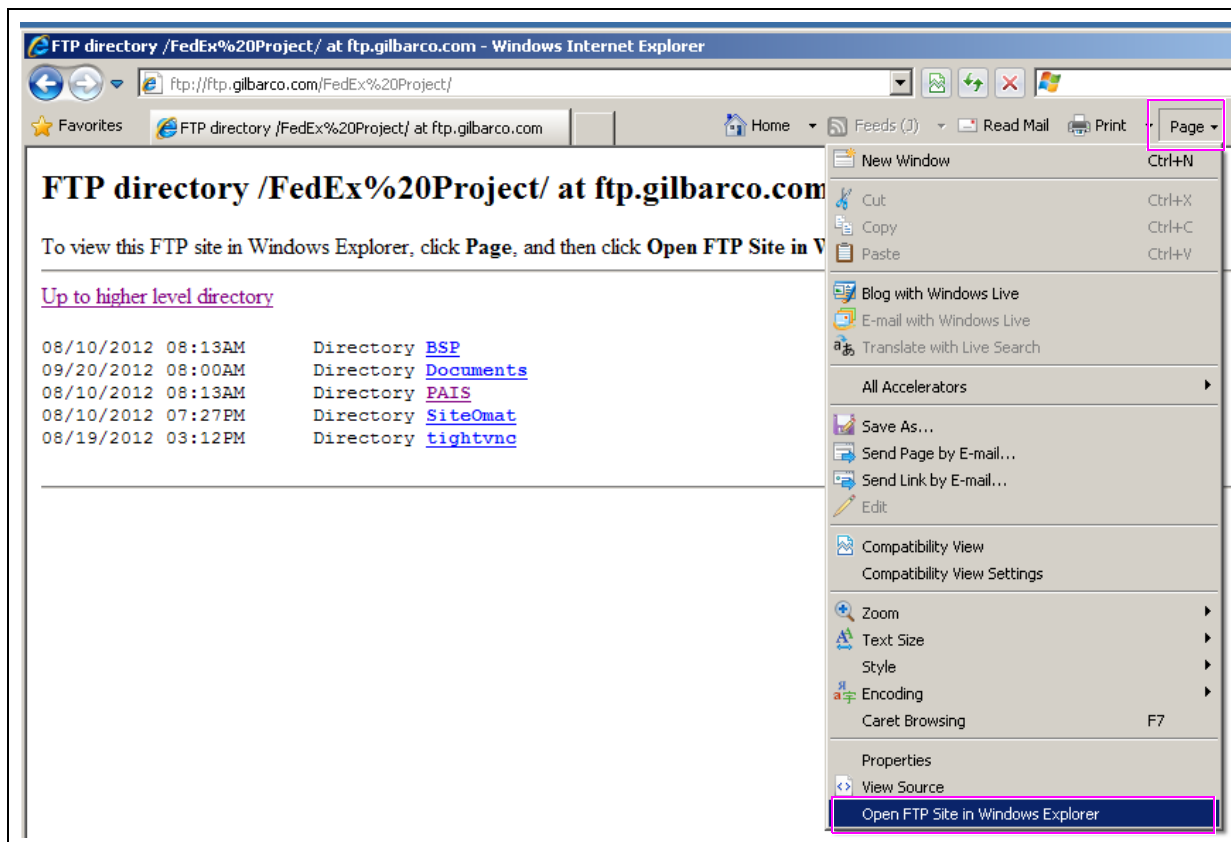
Downloading Software

To download the software, proceed as follows:

- 1 Download all software and documents required for installation:
 - Site: [ftp.gilbarco.com](ftp://ftp.gilbarco.com)
 - ID: -
 - Password: -

Note: If the ID and Password are not known, contact Gasboy TAC at 1-800-444-5529.
- 2 Navigate to the FedEx folder and download the entire contents of this folder.
- 3 Click the **Page** button and select Open FTP Site in Internet Explorer®.

Figure 3-4: Opening FTP Site in Internet Explorer



Installing Islander PLUS

To install the Islander PLUS, proceed as follows:

- 1 After lag bolts are inserted in the island, position the base plate over the lag bolts, wide-side facing front. The pedestal is then placed over conduit and into the base plate. To avoid pinching wires, two technicians are required for this step. Tighten the nuts over the lag bolts to secure to the island (see [Figure 3-5](#)).

Figure 3-5: Installing Islander PLUS



- 2 The control wiring must be attached to the Terminal Block after the pedestal is secure (see [Figure 3-6](#)). System power, dispenser communication, LAN, and so on, must be connected based on the Terminal Block diagram on the inside door of the pedestal (see [Figure 3-8](#) on [page 10](#)).

Figure 3-6: Connecting Control Wiring to Terminal Block

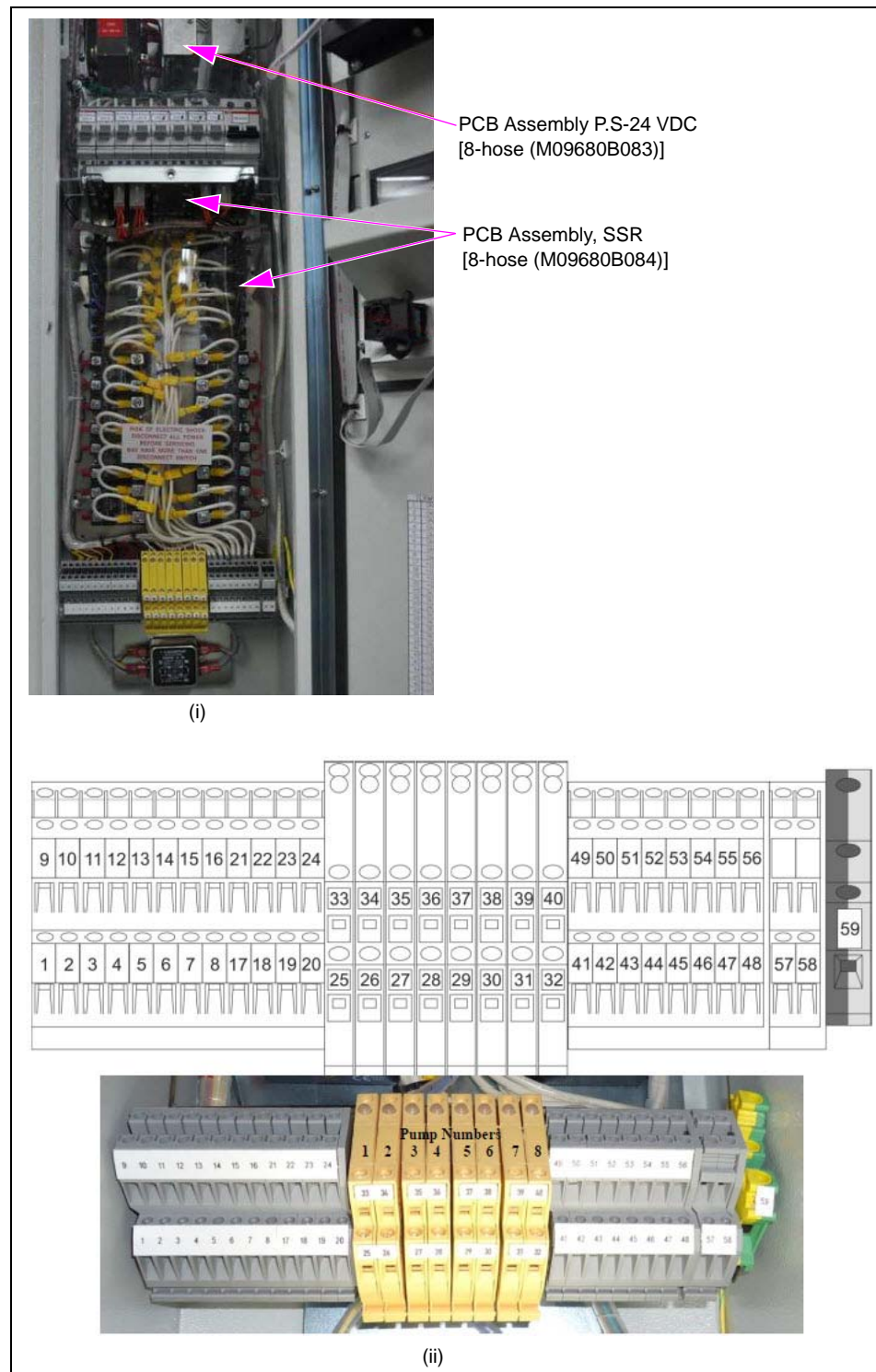


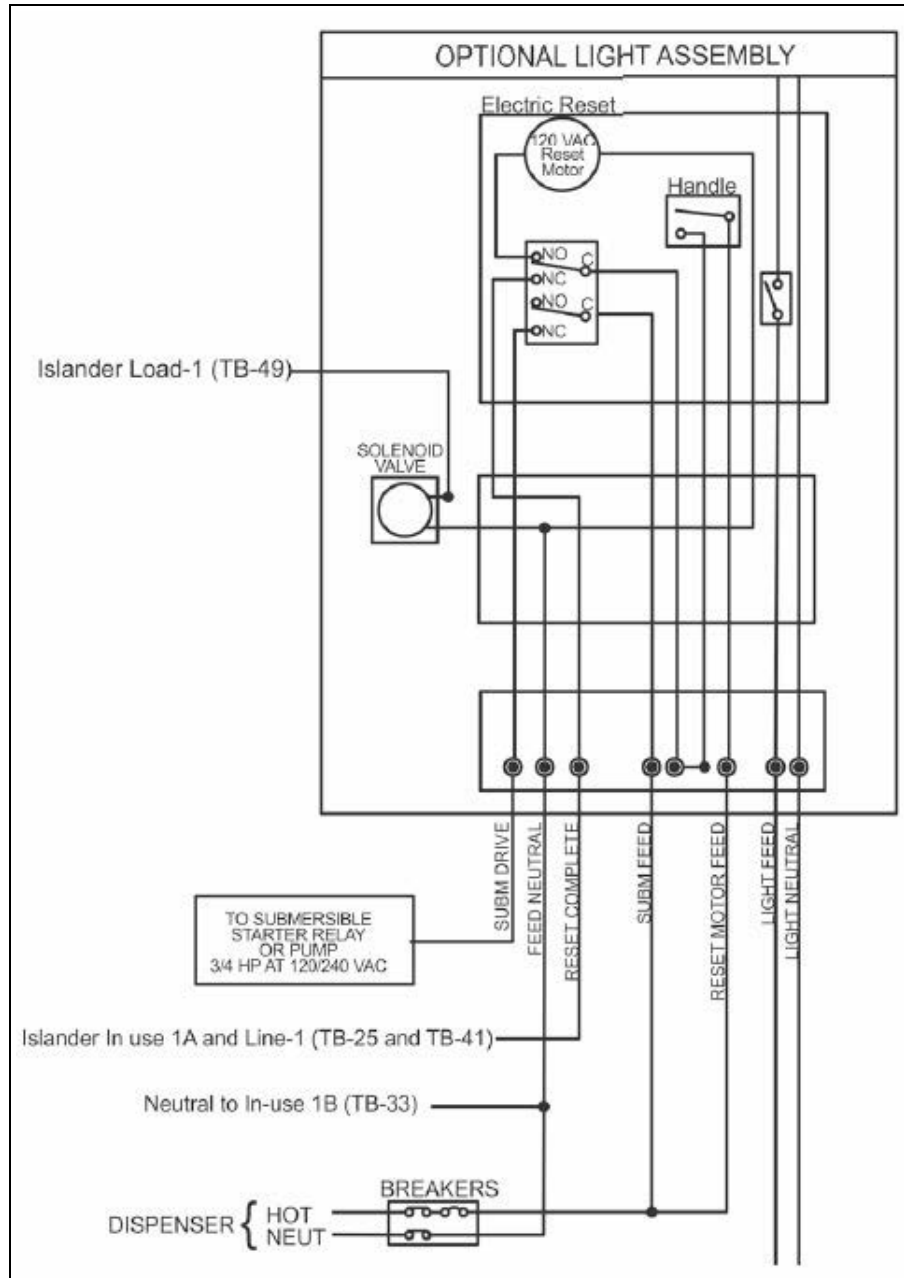
Figure 3-7: Terminal Block Connection

TERMINAL BLOCK CONNECTION			
1	GND_1_P	9	PULSER_1
2	GND_2_P	10	PULSER_2
3	GND_3_P	11	PULSER_3
4	GND_4_P	12	PULSER_4
5	GND_5_P	13	PULSER_5
6	GND_6_P	14	PULSER_6
7	GND_7_P	15	PULSER_7
8	GND_8_P	16	PULSER_8
17	+12V_1_P	21	+12V_5_P
18	+12V_2_P	22	+12V_6_P
19	+12V_3_P	19	+12V_7_P
20	+12V_4_P	24	+12V_8_P
25	IN_USE_1_A	33	IN_USE_1_B(-)
26	IN_USE_2_A	34	IN_USE_2_B(-)
27	IN_USE_3_A	35	IN_USE_3_B(-)
28	IN_USE_4_A	36	IN_USE_4_B(-)
29	IN_USE_5_A	37	IN_USE_5_B(-)
30	IN_USE_6_A	38	IN_USE_6_B(-)
31	IN_USE_7_A	39	IN_USE_7_B(-)
32	IN_USE_8_A	40	IN_USE_8_B(-)
41	LINE_1	49	LOAD_1
42	LINE_2	50	LOAD_2
43	LINE_3	51	LOAD_3
44	LINE_4	52	LOAD_4
45	LINE_5	53	LOAD_5
46	LINE_6	54	LOAD_6
47	LINE_7	55	LOAD_7
48	LINE_8	56	LOAD_8
57	NEUTRAL_IN(115/230V)		
58	LINE_IN(115/230V)		
59	GROUND_IN		

- 3** For pumps that are NOT Gasboy 9800's, follow the wiring diagrams for electronic and mechanical per your specific application.

- 4 Mechanical dispenser: Note that instead of the solenoid lead tying to the Reset Complete wire; it now connects directly to Terminal Block for the Gasboy PLUS. Also, note that the Reset Motor and Submersible Feeds tie together in the junction box of the dispenser (see [Figure 3-8](#)).

Figure 3-8: Wiring Diagram - Mechanical Dispenser



Note: Reset Complete is the in-use line, this jumpers to line and the load line, which comes back and run the solenoid valves. Pulse wires are polarized.

Figure 3-9: Mechanical Pump without Solenoid Valve

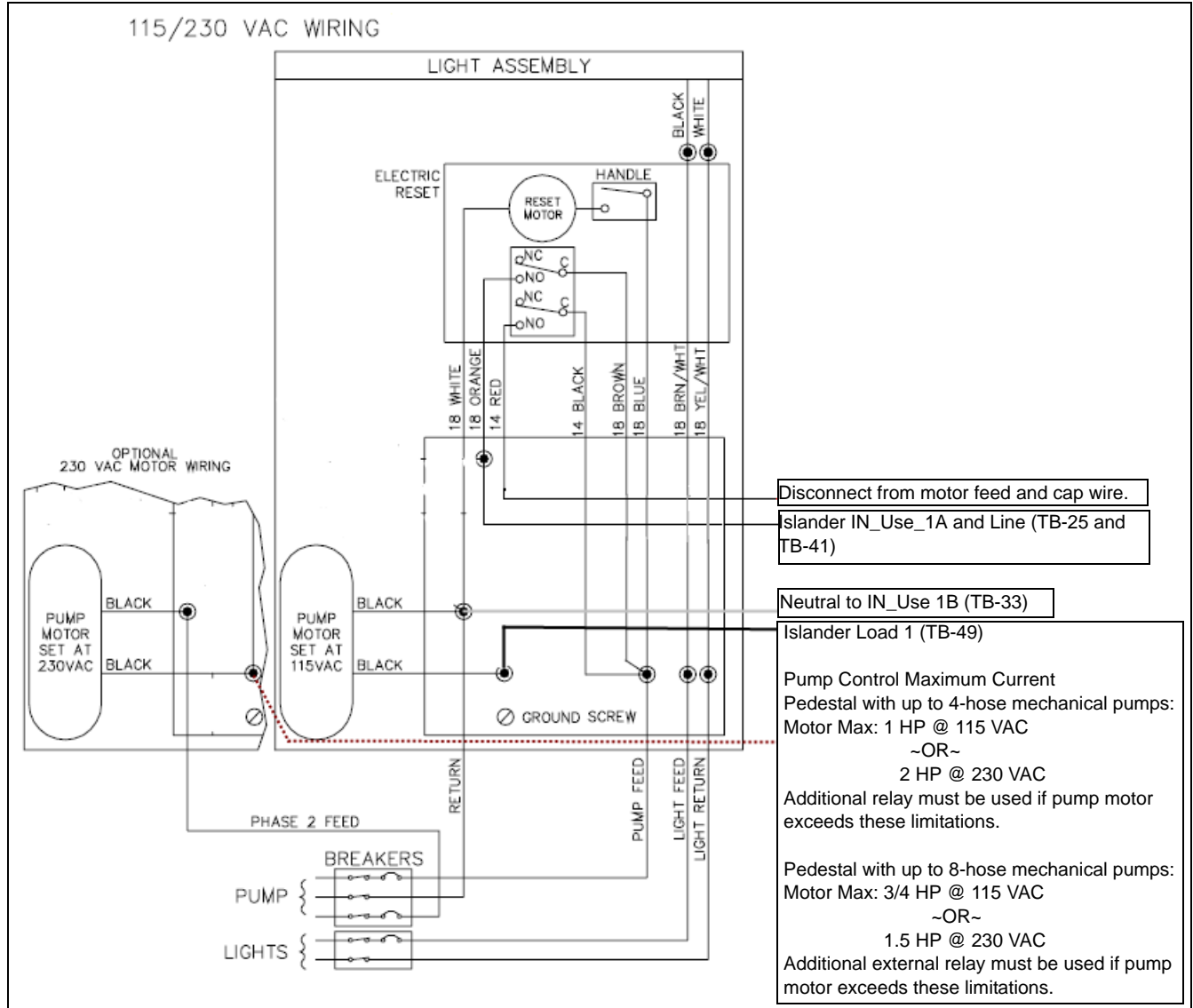


Figure 3-10: Mechanical Pumps On Stick - PMC Pumps

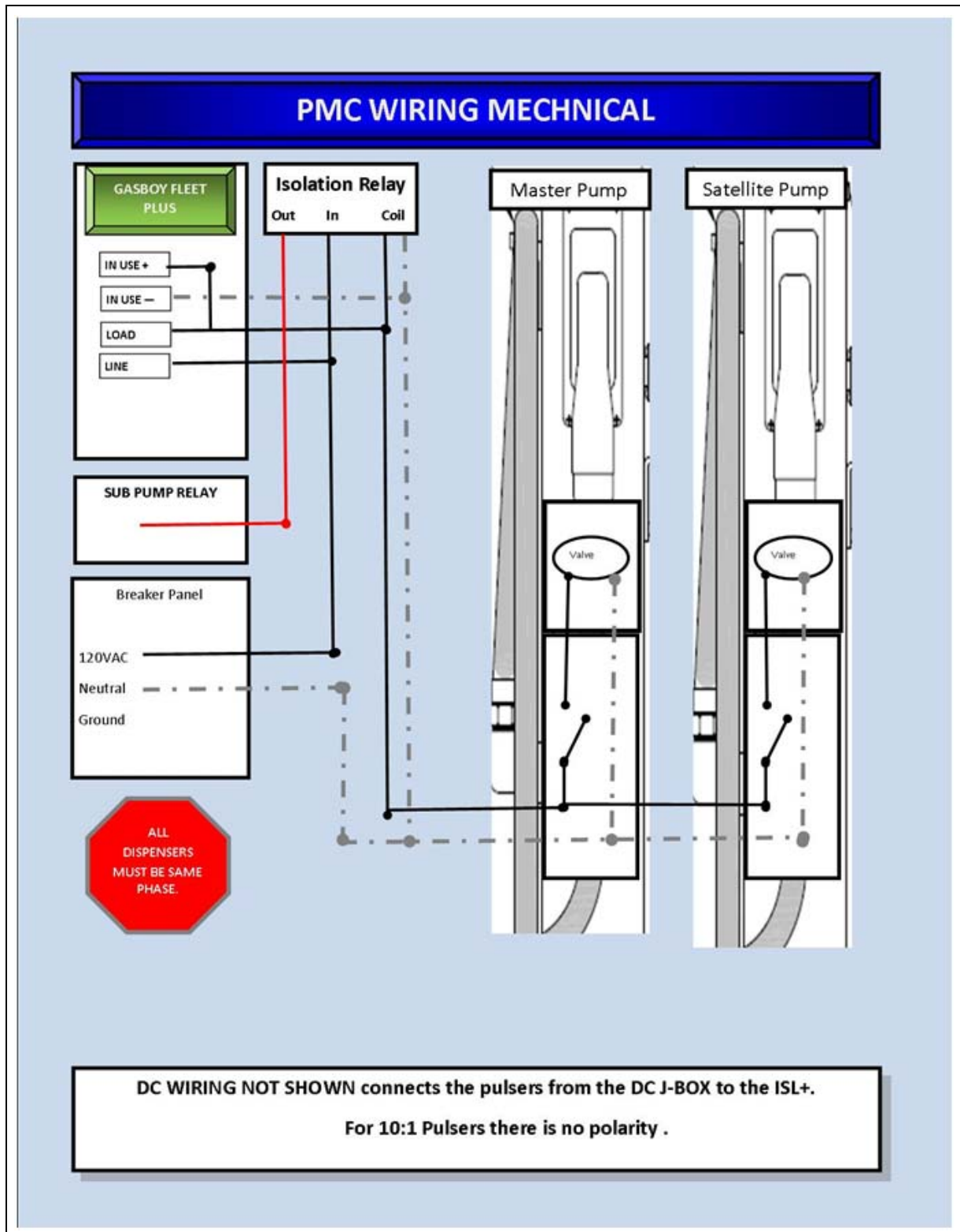
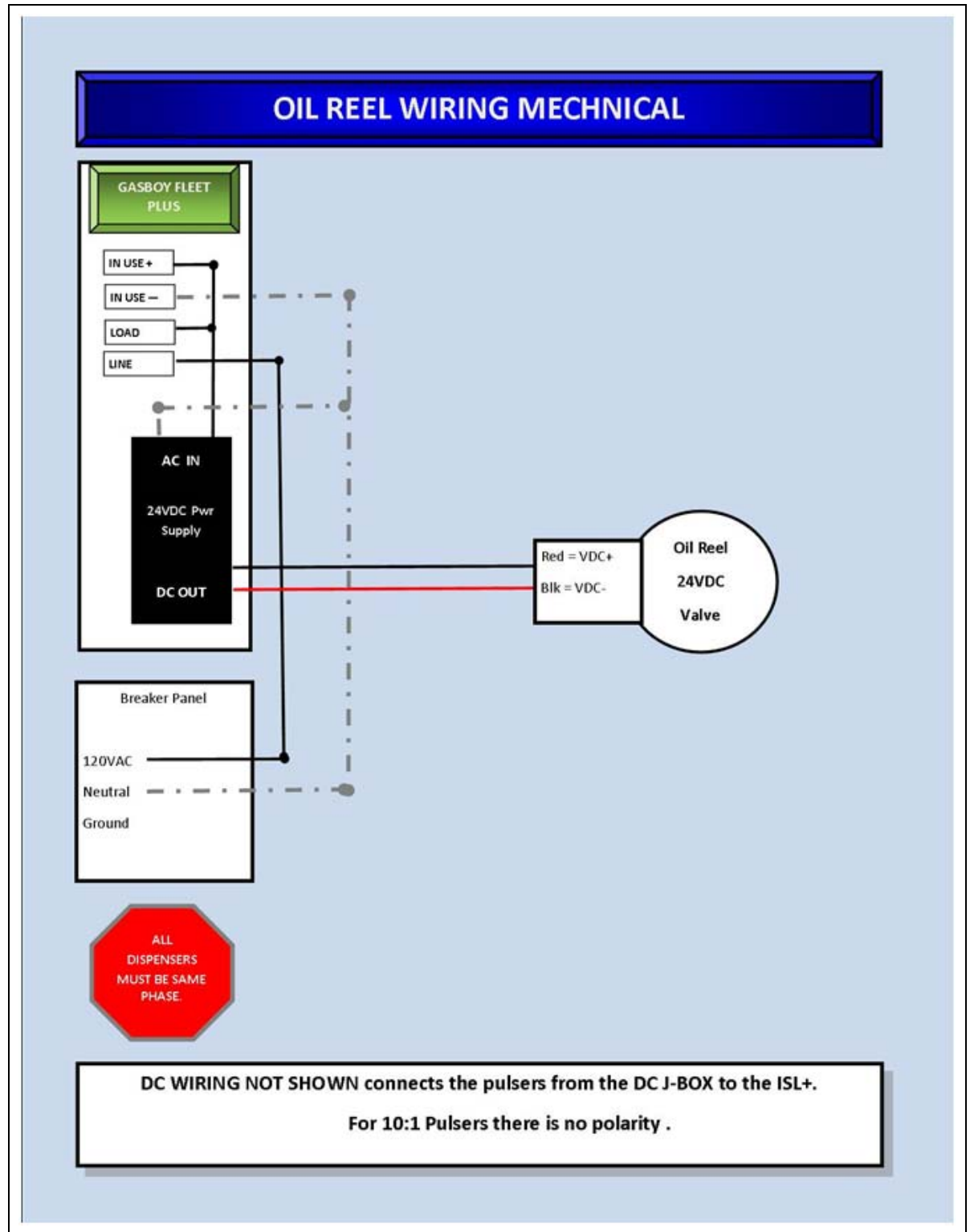


Figure 3-11: Hose Reels Using 24 V Solenoids

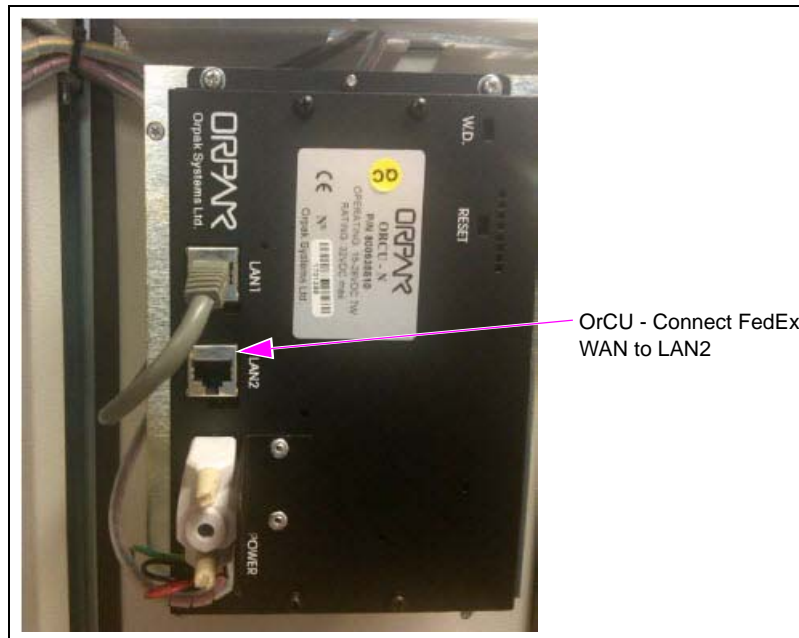


Connecting to FedEx Islander PLUS FMS Corporate Network

To connect to the FedEx Islander PLUS FMS corporate network, proceed as follows:

- 5 Locate the networking cable used in the existing FMS. Typical equipment is shown in [Figure 3-12](#) through [Figure 3-14](#) on [page 15](#). FedEx Islander PLUS FMS uses Power Over Ethernet (POE) and fiber optics.
- 6 After you have located the WAN Cable, connect this to the LAN2 Port of the Orpak Controller Unit (OrCU). The OrCU is located on the door of the 8-hose mechanical unit.

Figure 3-12: Connecting WAN Cable to LAN2 Port

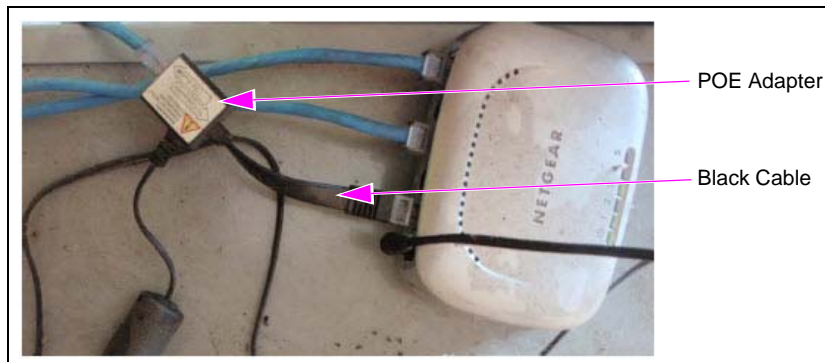


IMPORTANT INFORMATION

“FedEx Islander PLUS FMS wireless networking equipment - DO NOT DISCARD”

This is a POE Adapter that FedEx Islander PLUS FMS uses for it wireless connections. This will have a 12-24 V Power Adapter and an Ethernet connection. The black cable shown in [Figure 3-13](#) will commonly be found inside the existing FMS.

Figure 3-13: POE



- 7 FedEx Islander PLUS FMS also uses fiber optic termination boxes and switches for connecting to the corporate network. These devices are shown in [Figure 3-14](#).

Figure 3-14: Fiber Optic Termination Box and Switch



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4 – SiteOmat Software Set Up

Software Set Up

FedEx Islander PLUS FMS installation requires specific software to support T-Check Fleet Cards. FedEx uses only T-Check Fleet Cards in its fueling operations to authorize transactions. T-Check Fleet Cards are processed as any credit cards.

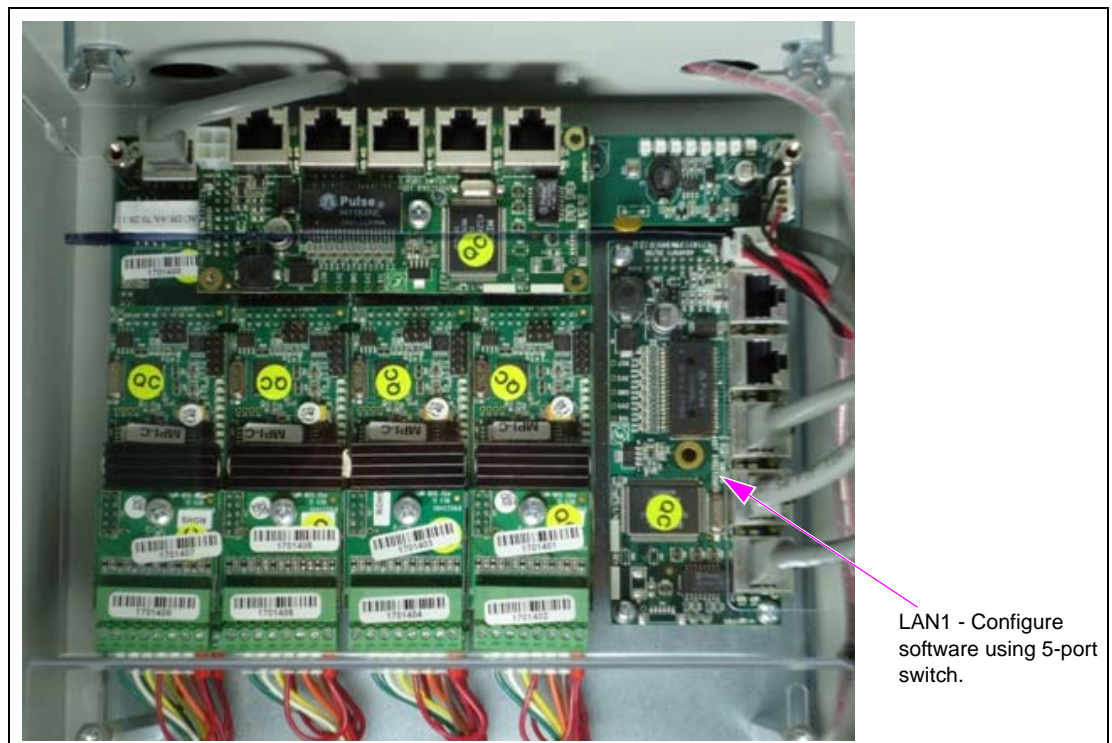
Process Check

Before you begin to configure software, verify that the correct software versions are loaded in the SiteOmat.

To configure the SiteOmat software, proceed as follows:

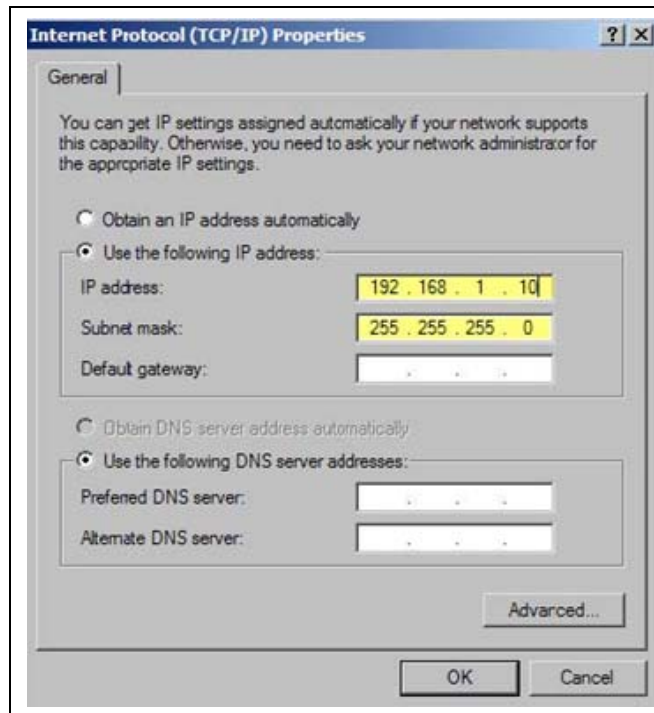
- 1 Connect your laptop and Ethernet Cable to the LAN1 Port next to the 8-port CommVortor Board (see [Figure 4-1](#)).

Figure 4-1: Configuring SiteOmat Software



- 2 Change the IP Address scheme on your laptop to align with the IP address scheme set in OrCU. An IP 192.168.1.10 as your laptop IP will work (see [Figure 4-2](#)).

Figure 4-2: Setting IP Address



- 3 To log on to OrCU Administrator page, enter <http://192.168.1.104:8090> in your browser. A logon pop-up box appears.
- 4 Type the User name (as admin) and Password (as admin). See [Figure 4-3](#).

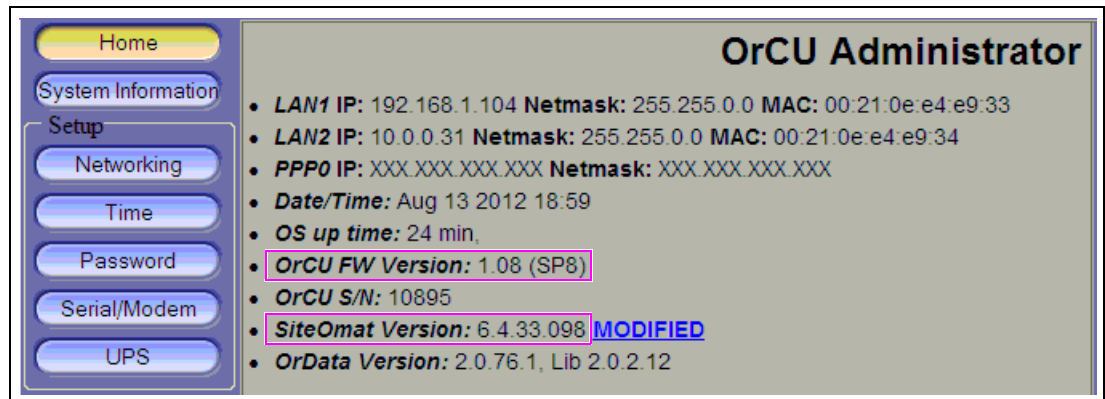
Figure 4-3: Entering User Name and Password



- 5 Click **OK**.

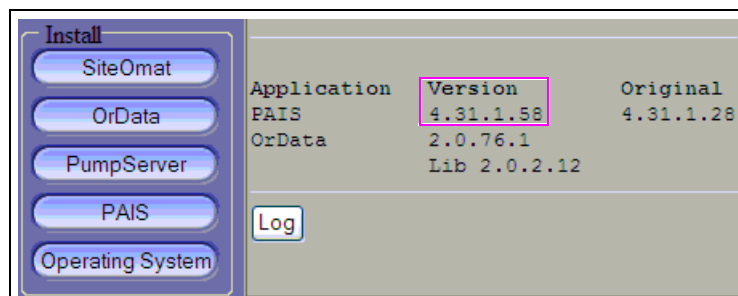
The OrCU Administrator home page appears (see [Figure 4-4](#)).

Figure 4-4: OrCU Administrator Home Page



- 6 In the home page, verify that the correct OrCU FW and SiteOmat Versions appear.
 - OrCU FW Version: 1.08 (SP8)
 - SiteOmat Version: 6.4.33.098
- 7 Click **MODIFIED** (see [Figure 4-4](#)) to open the versions page. Verify the PAIS Version [4.31.1.58 (see [Figure 4-5](#))].

Figure 4-5: Verifying PAIS Version



OrCU Set Up

Before you begin verify you have SiteOmat WAN (LAN2) IP Address, Subnet Mask, and Gateway IP Address. These are supplied on the FedEx Project Site Information Form.

To update the OrCU set up, proceed as follows:

- 1 Log into the OrCU Administration home page to see the IP, Net Mask, and MAC addresses of both LAN ports. You will also notice the date and time of the system (see [Figure 4-6](#)).
- 2 Ensure that the softwares mentioned in step 6 on [page 4-3](#) are installed before set up.
- 3 Click the **Networking** button (see [Figure 4-6](#)) to set the IP Address of LAN1 and LAN2. The OrCU Networking screen appears as shown in [Figure 4-6](#).

Figure 4-6: OrCU Networking Screen

The screenshot shows the OrCU Networking configuration interface. On the left, a sidebar contains navigation buttons: Home, System Information, Setup (highlighted with a red box), Time, Password, Serial/Modem, UPS, Install, SiteOmat, OrData, PumpServer, PAIS, and Operating System. The main content area is titled 'OrCU Networking' and is divided into several sections. The 'Network Settings' section on the left lists configurations for LAN1 and LAN2, including IP, Mask, and MAC addresses. The 'Additional Network Commands' section on the right provides an example command for routing and a note to use only commands that end and do not run eternally (e.g. ping). Below this are two large text areas for 'Network Commands' and 'Network Commands Output'. At the bottom right is a 'Test & Save' button, and at the bottom left is a 'Save network settings' button.

Network Settings	
• LAN1	
IP:	192.168.1.104
Mask:	255.255.0.0
MAC:	00:21:0e:00:25:d6
• LAN2	
IP:	10.0.0.1
Mask:	255.255.0.0
MAC:	00:21:0e:00:25:d7
• DNS	
GW:	192.168.1.1
Primary:	132.229.8.6
Secondary:	

Additional Network Commands
Enter Network commands. For routing to other networks use the following example:
'route add -net 10.180.0.0 netmask 255.255.255.0 gw 172.25.138.193'
Traffic to network 10.180 will be routed via gateway 172.25.138.193
Note: Use only commands that end and do not run eternally (e.g. ping)

Network Commands

Network Commands Output

Test & Save

Save network settings

- 4 Verify the LAN1 Network settings:
 - IP: 192.168.1.104
 - Mask: 255.255.0.0
 - MAC: default setting (do not change)

Figure 4-7: Verifying LAN1 Network Settings

The screenshot shows a 'Network Settings' window with a tree view on the left containing 'LAN1', 'LAN2', and 'DNS'. The 'LAN1' section is expanded, showing fields for IP (192.168.1.104), Mask (255.255.0.0), and MAC (00:21:0e:00:09:a6). The 'LAN2' section is also expanded, showing fields for IP, Mask, MAC (00:21:0e:00:09:a7), and GW. The 'DNS' section is expanded, showing fields for Primary (132.229.8.6) and Secondary. A 'Save network settings' button is at the bottom.

- 5 Set the LAN2 Network Settings according to the information supplied by FedEx in the FedEx Project Site Information Form.

Network Settings	Column Name (from where the data must be added)
IP	OrCU Lan 2 IP Address
Mask	OrCU Lan 2 Subnet Mask
MAC	Default setting (do not change)
Gateway (GW)*	OrCU Lan 2 GW (Gateway)

* Failure to set the gateway results in the inability to connect to the SiteOmat.

- 6 Set the Primary and Secondary Domain Name System [DNS (see [Figure 4-7](#))], if provided.
Note: This is not currently used but may be implemented in the near future.
- 7 Click the **Save networking settings** button, the notification text appears (see [Figure 4-8](#)).

Figure 4-8: Saving Networking Settings

The screenshot shows a 'Save network settings' button. Below it, a red text message reads: 'Your changes have been saved. Press Apply or reboot to have changes take effect.'

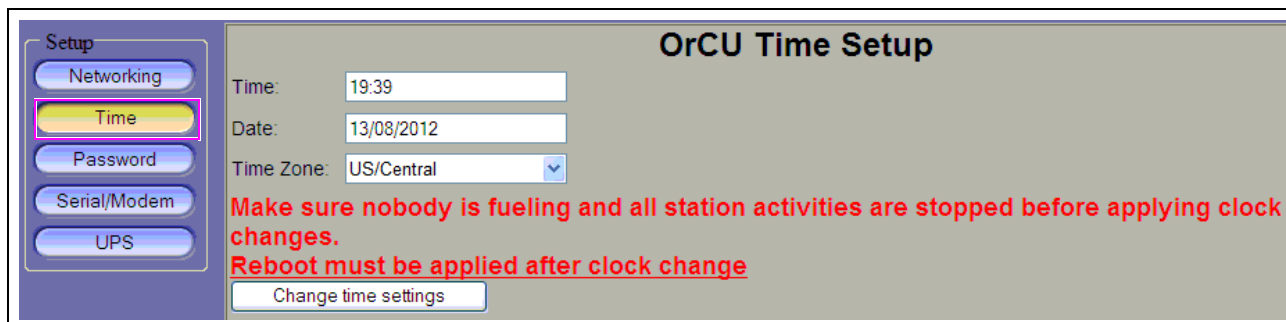
- 8 Click the **Apply Changes** button to save the changes and power cycle the unit to activate the new networking settings.

Figure 4-9: Applying Changes



- 9 Click the **Time** button to set the local Time, Date, and Time Zone information. The OrCU Time Setup screen appears (see [Figure 4-10](#)).

Figure 4-10: Setting Time, Date, and Time Zone



- 10 In the OrCU Time Setup screen (see [Figure 4-10](#)), set the following:
 - Time - Based on a 24-hour clock.
 - Date - Format is DD/MM/YYYY.
 - Time Zone - Set to Central for all sites.

IMPORTANT INFORMATION

Ensure all fueling activities are stopped at the island before applying the time settings.

- 11 Click the **Change time settings** button (see [Figure 4-10](#)).
- 12 On the System Information webpage, click the **Reboot** button to reboot OrCU.

~OR~

Power cycle the SiteOmat.

Setting SiteOmat

To set the SiteOmat, proceed as follows:

- 1 Verify that the PC connection to the SiteOmat has the following:
 - Operating System (OS) - Microsoft Windows® 2000/XP®/2003/Win7.
 - Microsoft Internet Explorer 7 or later.
 - Sun Microsystems Java™ application.

Note: Upgrade to the latest Java version if you experience any display issues with SiteOmat webpages (visit <http://java.com>).

- 2 Enter https://192.168.1.104 in your browser to login to the SiteOmat webpage. The SiteOmat Login screen appears (see [Figure 4-11](#)).
- 3 Type the User (as Admin) and Password (as Admin), and click **Login** (see [Figure 4-11](#)).

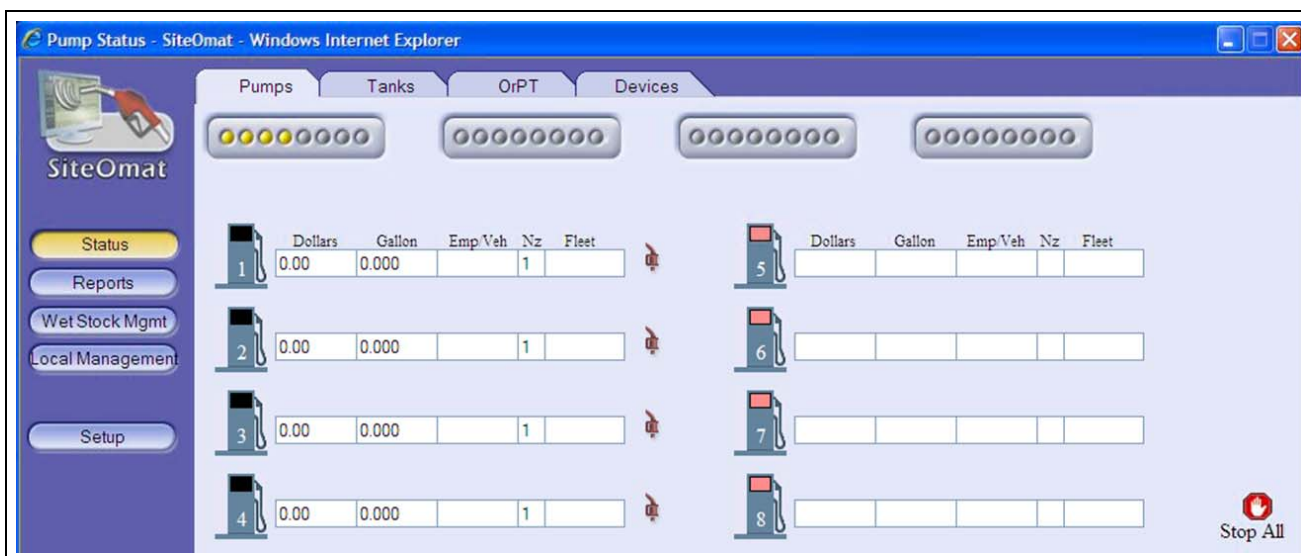
Figure 4-11: Entering Username and Password



The Pump Status screen of the SiteOmat appears.

- FedEx sites will have a default set up file loaded, there is no need to run the wizard.
- Default configuration - Status screen (see [Figure 4-12](#)).
 - 4 - Mechanical pumps
 - Virtual in use enabled - Nozzle points up
 - All pumps are blocked - Black pump head

Figure 4-12: Pump Status Screen



- 4 Click the **Setup** button. The Setup screen appears (see Figure 4-13).

Figure 4-13: Setup Screen

Pump Head				Nozzles						
Number	Head	Factor	Options	Hose#	Tank	Active	Vehicle Identification System			
							Channel	Cut off Delay	Satellite	
Pump 1 - Mechanical										
1	1	10	...	1	Tank_1-Diesel	<input type="checkbox"/>	0			
Pump 2 - Mechanical										
2	2	10	...	2	Tank_1-Diesel	<input type="checkbox"/>	0			
Pump 3 - Mechanical										
3	1	10	...	3	Tank_1-Diesel	<input checked="" type="checkbox"/>	0			
Pump 4 - Mechanical										
4	2	10	...	4	Tank_1-Diesel	<input checked="" type="checkbox"/>	0			

- 5 Click the **Advanced Mode** button to continue (see Figure 4-14). The screen as shown in Figure 4-15 appears.

Figure 4-14: Selecting Advanced Mode

Figure 4-15: Setup Screen

- 6 Click the **Global** tab to open the Station Parameters screen.

The Global Station Parameters screen appears (see [Figure 4-16](#)).

Figure 4-16: Station Parameters Screen

Station Parameters - SiteOmat - Windows Internet Explorer

SiteOmat

Navigation: Status, Reports, Wet Stock Mgmt, Local Management, **Setup**, Event Viewer, Admin, Exit

Logos: GASBOY, POWERED BY ORPAC

Global

Station

Description: None Code: 0

E-Mail: Language: English

Address: City:

Regional Settings

Date format: MM/DD/YY Time format: HH:MM:SS

Volume measurement: Gallon Odometer consumption: Mi/Gal

Currency measurement: Dollars EH consumption: Gal/Hr

Density: kg/m³ Temperature: °F

Height (measurement): Inch Height (display): Inch

Flow Rate: Gal/Hr

General

VAT: 0.00 % Zero transactions: 0

User Inactivity timeout: 45 seconds Alarm refresh rate: 5 seconds

Auto-Auth name: AutoAuth Authorization Timeout: 60

Location code (Magic): 1 Employee fleet name: default_fleet

Department color: Positive list Employee fleet code: 99999

Buttons: Save, Receipt..., Alarms..., Comm..., Backup..., Advanced...

Alarms 09/18/12 14:28:22 Urgent OrCU System Disk Usage High BOS High None

Admin -- None -- Station ID: 0 -- 09/18/12 15:41:48 -- V 6.4.33.098 DB:354

Trusted sites 100%

- 7 Set the following in the Station Parameters screen (see [Figure 4-17](#)):
- Description - Add the station description (station name), which is available in the SiteOmat Station Description column of the FedEx Project Site Information Form.
Note: Memphis as example: FXFMEM (FXF is FedEx Islander PLUS FMS and MEM is the location code).
 - Code - Add the station code, which is available in the SiteOmat Station Code column of the FedEx Project Site Information Form.
 - City - Enter station city.
 - Date format - Click the drop-down list from Date format and select **MM/DD/YYYY**.

Figure 4-17: Station Parameters Setting

Station Parameters - SiteOmat - Windows Internet Explorer

Forecourt Global

Station

Description: None Code: 0

E-Mail: Language: English

Address: City:

Regional Settings

Date format: MM/DD/YY

Volume measurement: MM/DD/YY

Currency measurement: DD/MM/YY

Density: DD/MM/YYYY

Height (measurement): MM/DD/YYYY

Flow Rate: DD.MM.YY

Time format: HH.MM.SS

Odometer consumption: Mi/Gal

EH consumption: Gal/Hr

Temperature: °F

Height (display): Inch

General

VAT: 0.00 Zero transactions: 0

- 8 In the General section (see [Figure 4-18](#)), enter the following:
- User Inactivity timeout - Set this to 60 seconds.
 - Zero transactions - Select **5** from the drop-down list.
 - Authorization Timeout - Set this to 60 seconds.

Figure 4-18: Global Parameters Section

Density: kg/m³ Temperature: °F
Height (measurement): Inch Height (display): Inch
Flow Rate: Gal/Hr

General

VAT: 0.00 % Zero transactions: 5
User Inactivity timeout: 60 seconds Alarm refresh rate: 5 seconds
Auto-Auth name: AutoAuth Authorization Timeout: 60
Location code (Magic): 1 Employee fleet name: default_fleet
Department color: Positive list Employee fleet code: 99999

Save Receipt... Alarms... Comm... Backup... Advanced...

- 9 Click the **Save** button to save the changes. A pop-up Processing box will display for few seconds while saving (see [Figure 4-19](#)).

Figure 4-19: Global Parameter Processing



- 10 In the Global screen, click the **Advanced** button.

Figure 4-20: Selecting Advanced Parameter

The screenshot shows the 'Station Parameters - SiteOmat - Windows Internet Explorer' window. The 'Global' tab is selected. The interface includes a left sidebar with buttons for Status, Reports, Wet Stock Mgmt, Local Management, Setup, Event Viewer, Admin, and Exit. The main area is divided into sections: Station, Regional Settings, and General. The 'Advanced' button at the bottom right is highlighted with a pink box.

Section	Parameter	Value
Station	Description	None
	E-Mail	
	Address	
	City	
Regional Settings	Date format	MM/DD/YY
	Volume measurement	Gallon
	Currency measurement	Dollars
	Density	kg/m ³
	Height (measurement)	Inch
	Flow Rate	Gal/Hr
	Time format	HH:MM:SS
	Temperature	'F
General	VAT	0.00 %
	User Inactivity timeout	45 seconds
	Auto-Auth name	AutoAuth
	Location code (Magic)	1
	Department color	Positive list
	Zero transactions	0
	Alarm refresh rate	5 seconds
	Authorization Timeout	60

Buttons at the bottom: Save, Receipt..., Alarms..., Comm..., Backup..., **Advanced...**

The Advanced Station Parameters screen appears with the advanced options (see [Figure 4-21](#)).

Figure 4-21: Advanced Station Parameter

11 In the Formats section, set the Decimal point precision for volume to 2 (see [Figure 4-21](#)).

12 In the Payment Terminal section, click **Setup**. The Setup PAIS screen appears (see [Figure 4-22](#)).

Figure 4-22: Setup PAIS Page

- 13 Change the following on the Setup PAIS screen (see [Figure 4-22](#) on [page 4-13](#)):
- Timeout - Set this to 45 seconds, this is the time allowed to contact the host network.
 - Card may not be reused within - Set this to 0 minutes, which allows the same card to be used again for oil or Diesel Exhaust Fluid (DEF) to be dispensed.
 - Pre-authorize amount - Set this to \$400.
 - Credit processor - Select **T-Check** from the drop-down list.
 - Device Port - Enter the Device Port, which is available in the Fipay Port Number column of the FedEx Project Site Information Form.
 - Device IP - Enter the Device IP, which is available in the Fipay Server IP Address column of the FedEx Project Site Information Form.
- 14 Click the **ProductMap** button to map the local product codes that you have loaded into the site to those which are predetermined by network processor. The Translate Product Codes screen appears (see [Figure 4-23](#)).

Figure 4-23: Translate Product Codes

Translation group: T-Check

External code	Product name - code
62	DEF - 2000
63	Oil - 1
99	Diesel - 1200

OK Cancel

Local Product Codes set in the SiteOmat

- 15 Verify that T-Check is available in Translation group drop-down list.

- 16 Set the following in the Translate Product Codes screen based on the table:
- Product name - code: Select local product loaded in the Islander PLUS system from the Product name - code drop-down list.
 - External code: Enter the corresponding network code for the local product set in the Product name - code box.

External code	Product name - code
62	DEF - 2000
63	Oil - 1
99	Diesel - 1200

Note: Repeat step 16 to add product codes.

- 17 After completing the entries, click **OK** to save (see Figure 4-23 on page 4-14); click **Cancel** to exit the screen without saving.
- 18 Verify that the Daily run enabled check box is not selected (see Figure 4-22 on page 4-13).
- 19 Click the **Save** button (see Figure 4-21 on page 4-13) to save your changes and return to the Station Parameters screen with the advanced options.

Figure 4-24: Setting Station Parameter

- 20 Click the **Modify** button to save the changes and return to the Global tab (see Figure 4-24).
- 21 From the Global tab (step 12 on page 4-13), click the **Save** button.

- 22 Click the **Forecourt** tab.

Figure 4-25: Selecting Forecourt



- 23 Before you continue, click the **Save** or **Reload** button to load the new configuration changes into the system in the Forecourt tab.

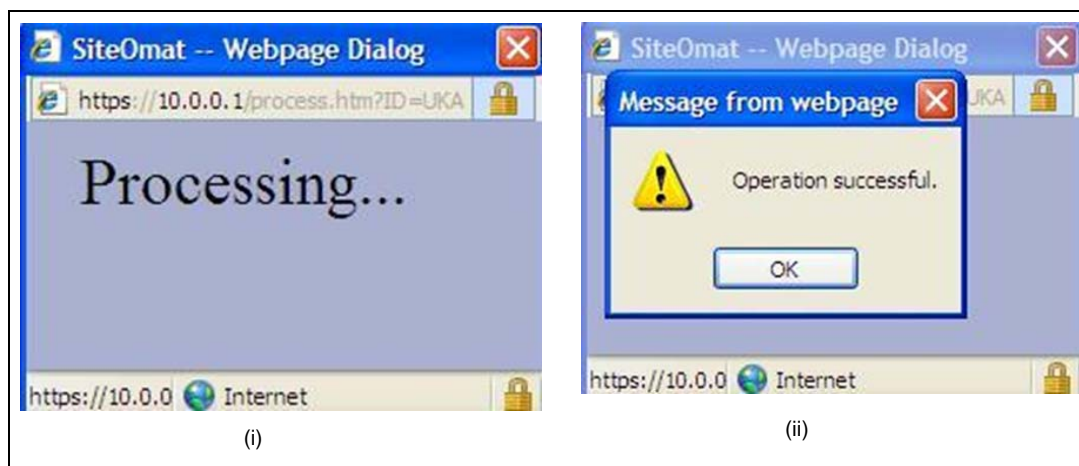
Figure 4-26: Configuring Forecourt Tab



Clicking the **Reload** button displays a pop-up box as shown in [Figure 4-27](#).

- 24 Click **OK** when reloading is complete.

Figure 4-27: Reloading SiteOmat Process

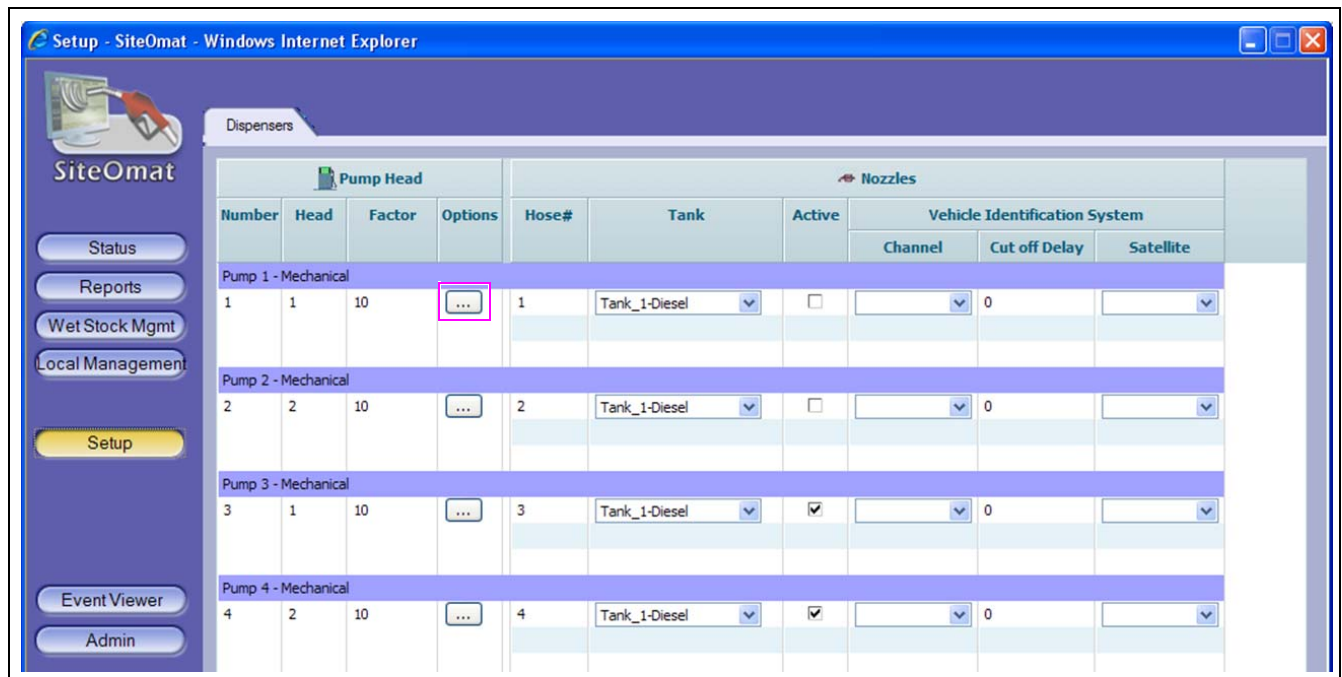


Pump Configuration

To configure the pumps, proceed as follows:

- 1 To verify the pump configuration, click the **Setup** button from the status screen (see [Figure 4-28](#)).

Figure 4-28: Verifying Pump Configuration



- 2 Click ... [ellipse (see [Figure 4-28](#))]. The Setup Pump Settings screen appears.

Figure 4-29: Setup Pump Settings - General



- 3 In the General section, verify the following (see [Figure 4-29](#)):
 - Pump Number - This is the number of the pump.
 - Pump Head - For example, Pump Head is 1 for the first pump on the cluster and 2 for the second pump on the cluster.
 - Number of nozzles - For example, Number of nozzles will always be 1.
 - Mode - Select **Need Authorize** from the drop-down list.
 - Pump server - Select **PumpServer** from the drop-down list.
 - Cluster - Set 1 for the first two master pumps, 2 for the next two master pumps.

Following table shows the Cluster information for Mechanical Pumps.

Pump #	Head	Cluster
1	1	1
2	2	1
3	1	2
4	2	2
5	1	3
6	2	3

- Orpak Payment Terminal (OrPT) - Select **ORPT** from the drop-down list.
Note: This setting causes beeps at the island when a ring or tag is read and authorized.

Figure 4-30: Verifying Pump Server - Message Factors

- 4 In the Message Factors section, verify that the details are set as shown in [Figure 4-30](#).
 - If transaction amount and volume are not being recorded properly this setting may need to be changed.
 - Do not change until the Pulse Factor and DIP switches have been verified and corrected.

Figure 4-31: Verifying Mechanical Pump - Card

- 5 In the Specific section, verify the following is set up for the installed pumps (see [Figure 4-31](#) on [page 4-18](#)).
- Pulser Type - Select **Half Cycle Count Pulse** from the drop-down list.
 - Pulse Factor - Enter the correct setting for the installed pumps (as 10 or 100).
 - 10 - 10:1 Pulser on PUMP
 - 100 - 100:1 Pulser on PUMP
 - Virtual In Use - Select **Enable** when a handle switch is not available and select **Disable** at all other times.
 - This is always required for hose reels for oil and lubricants.
 - This is required for some dispensers (PMC Pumps) without proper handle-switch wires.
 - Flow Protection timeout - Set this to 70 seconds.

Note: Flow protection timeout controls the active time (70 seconds) of the Virtual In Use after pulses stop.

- 6 Repeat steps 1 (on [page 4-17](#)) to 5 for all pumps and oil reels.

IMPORTANT INFORMATION	
The More Options button is not used for FedEx Islander PLUS FMS installations.	

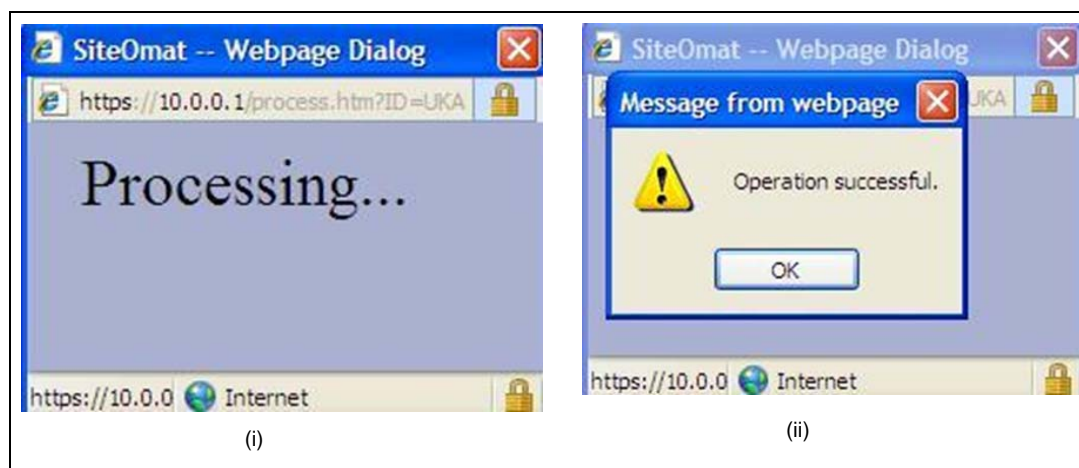
- 7 To save the pump configuration settings, click **Save**, the Setup screen appears.

Figure 4-32: Saving Pump Configuration



- 8 In the Setup screen, click **Save** (see [Figure 4-32](#)).
- 9 To load new configuration changes into the system, click **Reload**, a pop-up box appears as shown in [Figure 4-33 \(i\)](#).
- 10 Click **OK** when reloading is complete [see [Figure 4-33 \(ii\)](#)].

Figure 4-33: Reloading Configuration



Tank Configuration

To configure the tanks, proceed as follows:

- 1 To verify the tank configuration, from the status screen click the **Setup** button (see [Figure 4-34](#)), the Setup screen appears.

Figure 4-34: Setup Screen

The screenshot shows the 'Setup - SiteOmat - Windows Internet Explorer' window. On the left is a sidebar with buttons: Status, Reports, Wet Stock Mgmt, Local Management, **Setup** (highlighted with a red box), Event Viewer, and Admin. The main area is titled 'Dispersers' and contains a table with columns for Pump Head, Hose#, Tank, Active, and Vehicle Identification System (Channel, Cut off Delay, Satellite). The table lists four pumps, all of which are mechanical and use 'Tank_1-Diesel'.

Pump Head				Nozzles						
Number	Head	Factor	Options	Hose#	Tank	Active	Vehicle Identification System			
							Channel	Cut off Delay	Satellite	
Pump 1 - Mechanical										
1	1	10	...	1	Tank_1-Diesel	<input type="checkbox"/>	0	0		
Pump 2 - Mechanical										
2	2	10	...	2	Tank_1-Diesel	<input type="checkbox"/>	0	0		
Pump 3 - Mechanical										
3	1	10	...	3	Tank_1-Diesel	<input checked="" type="checkbox"/>	0	0		
Pump 4 - Mechanical										
4	2	10	...	4	Tank_1-Diesel	<input checked="" type="checkbox"/>	0	0		

- 2 To view the additional options, click the **Advanced Mode** button.

Figure 4-35: Selecting Advanced Mode

The image shows a horizontal toolbar with six buttons: Wizard..., Reload, Save, Export..., Import..., and **Advanced Mode** (highlighted with a red box).

- 3 In the Setup screen, select the **Forecourt > Tanks** tab (see Figure 4-36). The Setup Tanks screen appears (see Figure 4-37)

Figure 4-36: Setup Screen - Tanks Tab



Figure 4-37: Setup Tanks Screen

The screenshot shows a web browser window titled "Setup Tanks - SiteOmat -- Webpage Dialog". It contains a table with the following data:

Description	Number	Capacity	Fuel Type	Assumed Volume	Probes
Tank_2	2	55.00	Oil	0.00	
Tank_1	1	20000.00	Diesel	0.00	
Tank_3	3	5000.00	DEF	0.00	

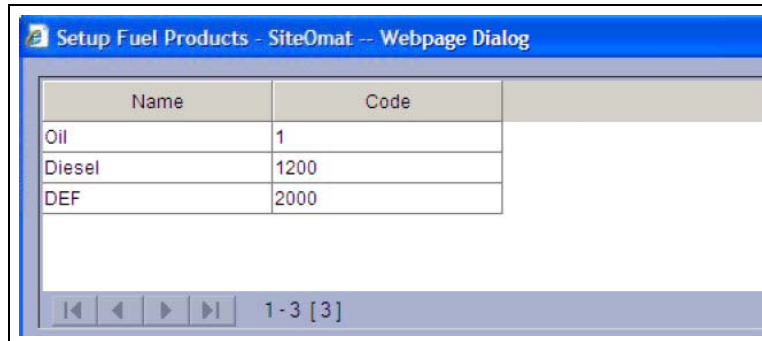
Below the table, there are input fields for "Tank Properties" and "Fuel Leak". The "Tank Properties" section includes fields for "Description:", "Number:", "Capacity:", "Gallon", "Fuel Type:", and a "Products..." button (highlighted with a pink box). The "Fuel Leak" section includes fields for "Leak rate:", "Gallon/hr", "Dead band:", "%", "Quiet time:", "min", and "Warn after:", "days".

- 4 In the Setup Tanks screen, verify that the following Tanks are set up.

Description	Number	Capacity (in Gallon)	Fuel Type
Tank_1	1	20000.00	Diesel
Tank_2	2	55.00	Oil
Tank_3	3	5000.00	DEF

- 5 To verify that the products are set up, in the Tank Properties section, click the **Products** button (see [Figure 4-37](#) on [page 4-21](#)). The Setup Fuel Products screen appears (see [Figure 4-38](#)).

Figure 4-38: Setup Fuel Products Screen



- 6 Verify that the following Names (fuel types) are set up with the Codes.

Name	Code
Oil	1
Diesel	1200
DEF	2000

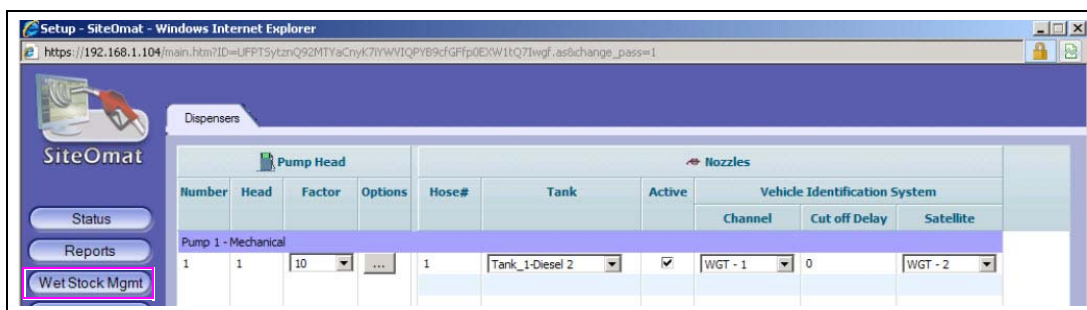
Setting Fuel Price

To set the fuel price, proceed as follows:

Pricing must be loaded for the pumps to properly operate. Use \$1.00 for all products at this time.

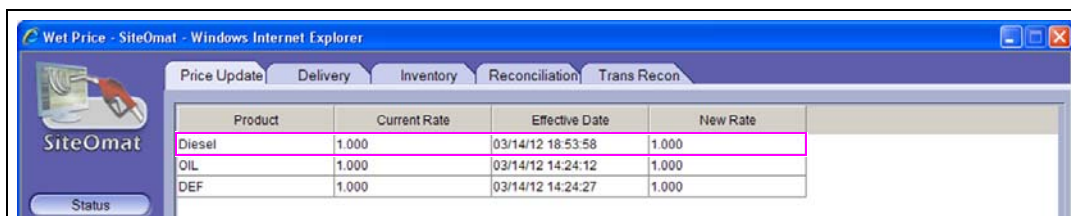
- 1 From the status screen, click the **Wet Stock Mgmt** button (see [Figure 4-39](#)), the Wet Price screen appears (see [Figure 4-40](#)).

Figure 4-39: Selecting Wet Stock Management



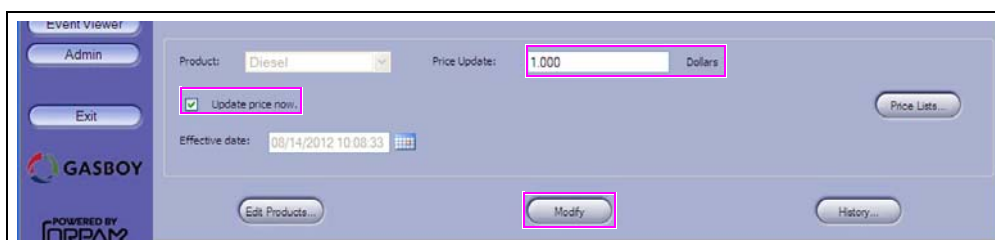
- 2 From the Wet Price screen, click the **Price Update** tab. The available products screen appears (see [Figure 4-40](#)).

Figure 4-40: Verifying Price Update



- 3 Click the name of the Product that you want to change (for example, change the price of Diesel).

Figure 4-41: Modifying Price Update



- 4 Enter the updated price in the Price Update field (for example, \$1.000).
- 5 Select the **Update price now** check box, click the **Modify** button to update the price.

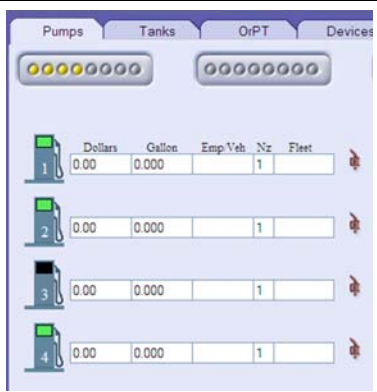
Unblocking or Activating Pumps

To unblock or activate pumps, proceed as follows:

After the SiteOmat is configured, unblock or activate the pumps/oil reels that are on the site. All the pumps not being used will remain blocked.

- 1 Determine the pumps/reels that need to be activated and identify how they are numbered.
 - For example, the island has two master pumps with satellites and one oil reel.
 - Master and satellites are numbered 1 and 2.
 - Oil reel is numbered 4.
- 2 In this example, Pumps 1, 2, and 4 are active. Pump 3 is blocked.
 - For example, Status screen [see [Figure 4-42 \(i\)](#)]
 - For example, Setup screen [see [Figure 4-42 \(ii\)](#)]

Figure 4-42: Setup and Status Screen of Pump



(i)

Pumps Status Screen

Pump Head				Nozzles			
Number	Head	Factor	Options	Hose#	Tank	Active	Vehicle Identification System
							Channel Cut off Delay Satellite
Pump 1 - Mechanical							
1	1	100	...	1	Tank_1-Diesel	<input checked="" type="checkbox"/>	0
Pump 2 - Mechanical							
2	2	10	...	2	Tank_1-Diesel	<input checked="" type="checkbox"/>	0
Pump 3 - Mechanical							
3	1	10	...	3	Tank_1-Diesel	<input type="checkbox"/>	0
Pump 4 - Mechanical							
4	2	10	...	4	Tank_1-Diesel	<input checked="" type="checkbox"/>	0

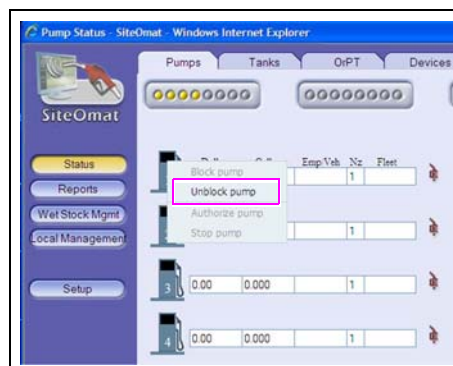
(ii)

Pumps Setup Screen

- 3 On the Pump Status screen, right-click the pump that you want to unblock and select the **Unblock pump** option from the list.

Note: Right-clicking at the black rectangle of the pump works best.

Figure 4-43: Unblocking Pump



- 4 To activate the pump, in the Setup screen, select the **Active** check box for the pump that you want to activate (see Figure 4-44).

Note: For example, only Pump 1 is active in the following screen.

Figure 4-44: Activating Pump

The screenshot shows the 'Setup - SiteOmat - Windows Internet Explorer' window. The 'Dispersers' tab is selected. The main table has columns for 'Pump Head' (Number, Head, Factor, Options), 'Hose#', 'Tank', 'Active', and 'Nozzles' (Vehicle Identification System: Channel, Cut off Delay, Satellite). Pump 1 is active, and Pump 2 is inactive. A pink box highlights the 'Active' column.

Pump Head				Hose#	Tank	Active	Nozzles		
Number	Head	Factor	Options				Channel	Cut off Delay	Satellite
Pump 1 - Mechanical									
1	1	100	...	1	Tank_1-Diesel	<input checked="" type="checkbox"/>		0	
Pump 2 - Mechanical									
2	2	10	...	2	Tank_1-Diesel	<input type="checkbox"/>		0	

IMPORTANT INFORMATION

If unsure which dispensers to unblock or which additional pumps to add, call Gasboy Technical Support at 1-800-444-5529.

Weights & Measures (W&M) Dongle Activation Procedure

To activate the W&M Dongle, proceed as follows:

IMPORTANT INFORMATION

Mechanical pumps will not authorize if the W&M Dongle is NOT installed and set up.

- 1 Verify that the W&M Dongle is installed in OrCU.

Figure 4-45: W&M Dongle Installation



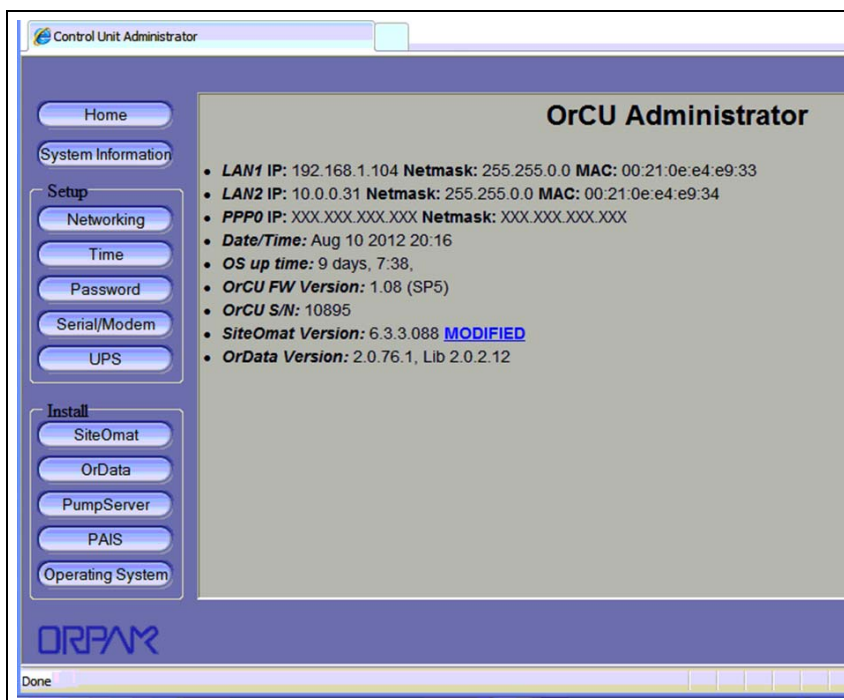
- 2 To log on to OrCU Administrator screen, enter <https://192.168.1.104:8090> in your browser. A login pop-up box appears (see [Figure 4-46](#)).

Figure 4-46: OrCU Admin Login Dialog Box



- 3 Enter User name (as admin) and Password (as admin).
- 4 Click **OK**. The OrCU Administrator home page appears (see [Figure 4-47](#)).

Figure 4-47: OrCU Administration Home Page



- 5 Click the **Serial/Modem** button (see [Figure 4-48](#)), the OrCU Serial/Modem setting screen appears (see [Figure 4-49](#) on [page 4-28](#)).

Figure 4-48: Serial/Modem Setup

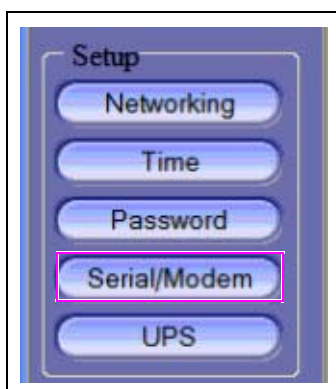


Figure 4-49: OrCU Serial/Modem Settings

- 6 In the OrCU Serial/Modem settings screen, perform the following:
- Select the **Use port for External Devices (TLG) (Com2)** button.
 - Click the **Set Serial/Modem settings** button.

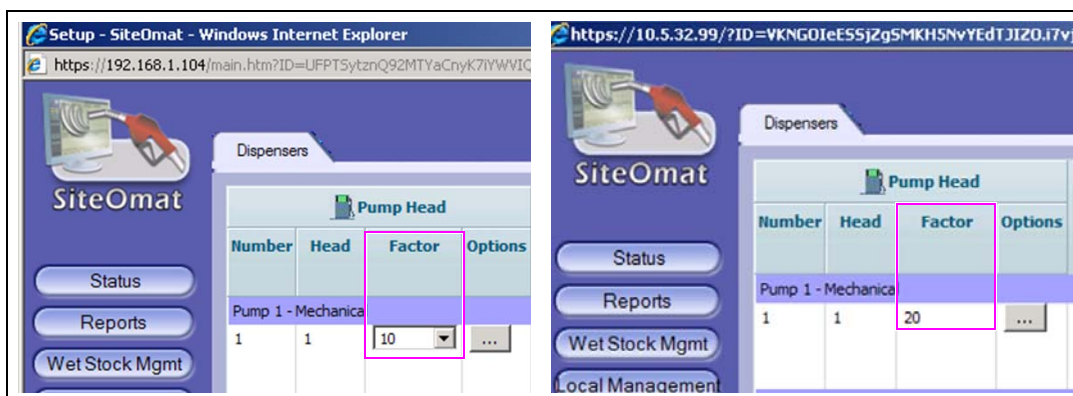
After clicking the **Set Serial/Modem settings** button, the following notification appears (see [Figure 4-50](#)).

Figure 4-50: Serial/Modem Warning Screen

- 7 Power cycle Islander PLUS unit for the changes to take effect. Power cycle takes 2 to 3 minutes to complete.

- 8 Verify that the W&M Dongle is activated. The pulse factor drop-down list will no longer be present on the Setup screen.

Figure 4-51: Setting Pulse Factor



Process Check

After the wiring connections have been made, test the dispensers using the bypass switches on the Terminal Block.

Synchronizing with Fleet Head Office (FHO)

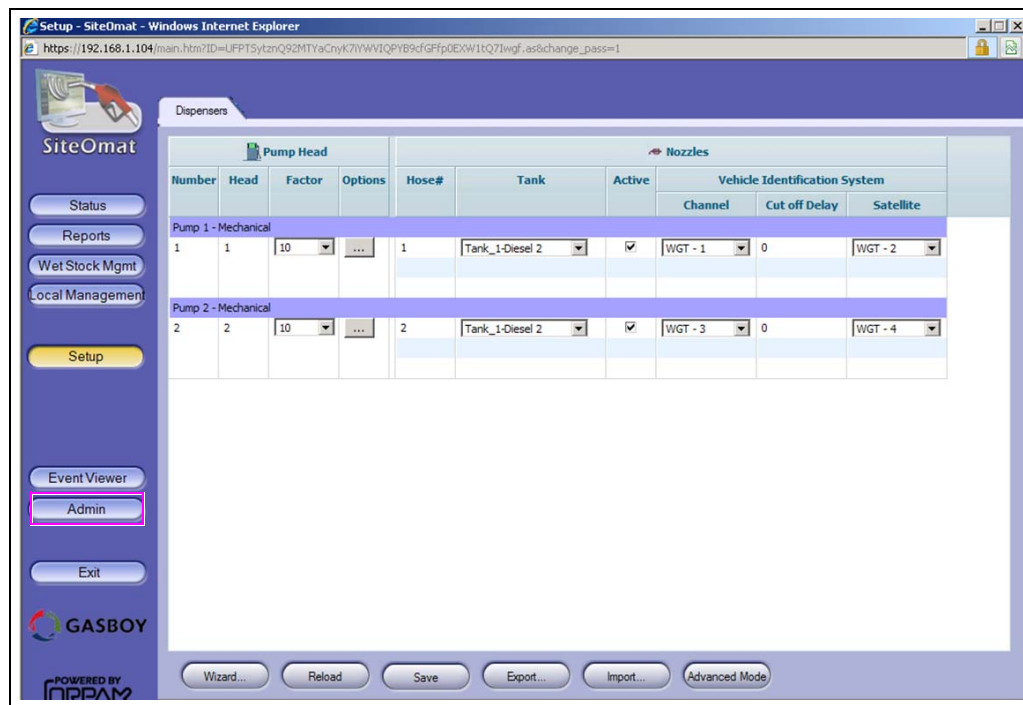
Head Office Communicator (HOCOMM) user is added to communicate to the FHO. This user is automatically added from the Setup screen.

HOCOMM User

To verify that the HOCOMM user is added to communicate to the FHO, proceed as follows:

- 1 From SiteOmat Status screen, click the **Admin** button. The Users SiteOmat screen appears (see [Figure 4-52](#)).

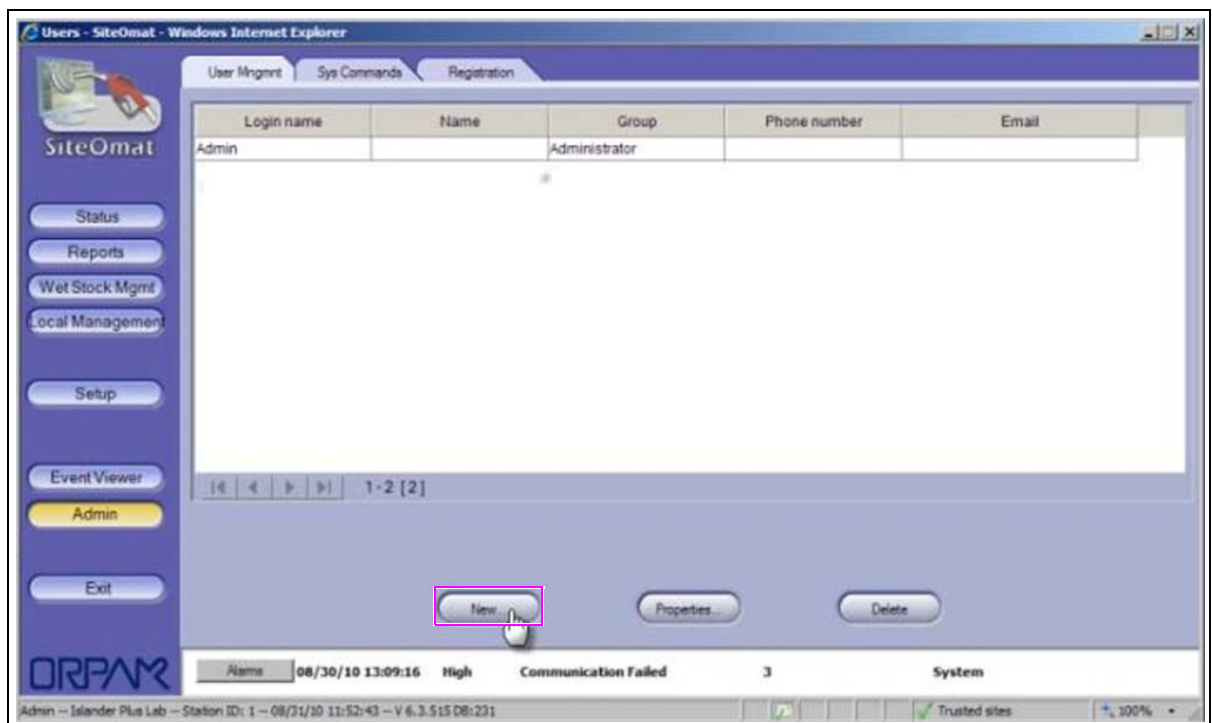
Figure 4-52: SiteOmat Status Screen



- 2 Verify that the HOCOMM user is displayed in the list of users.

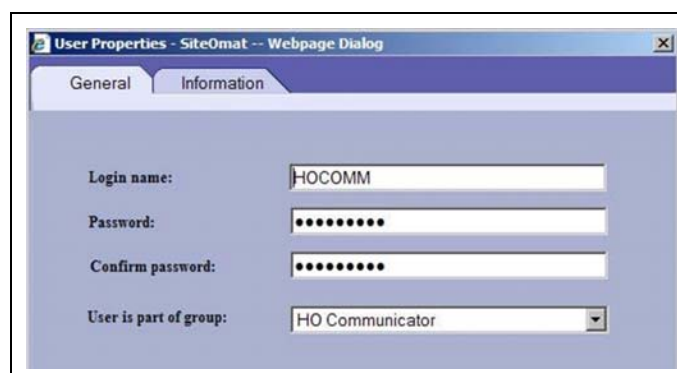
- 3 If the HOCOMM user does not exist, proceed to step 4 and add the HOCOMM user.

Figure 4-53: Adding HOCOMM User



- 4 Click the **New** button to add a user, the User properties screen appears (see [Figure 4-54](#)).

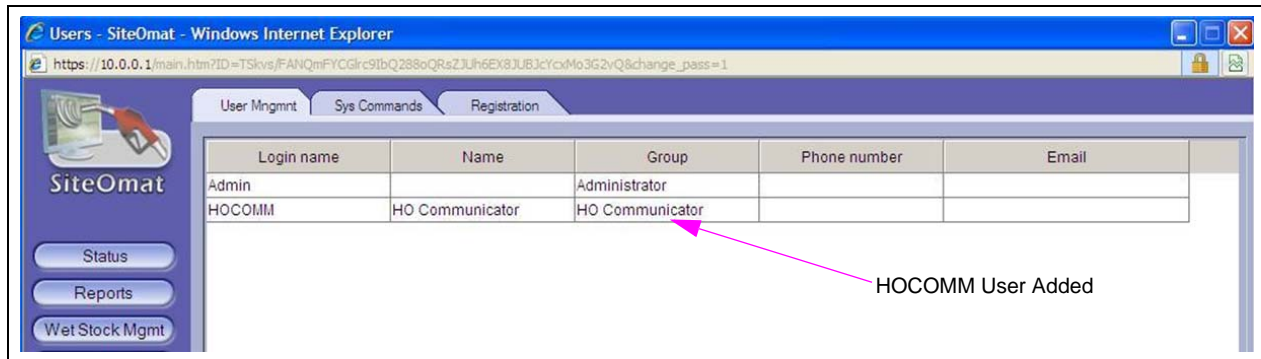
Figure 4-54: User Properties



- 5 Set the User Properties as follows (see [Figure 4-54](#)):
- Login name - Set the login name as HOCOMM (all capital letters).
 - Password - Set the password as 123456.
 - Confirm password - Enter the same password (as 12345).
 - User is part of group - Select **HO Communicator** from the drop-down list.
- 6 Click the **OK** button to save the User Properties.

After saving the user properties, the newly added HOCOMM user displays in the list of users (see [Figure 4-55](#)).

Figure 4-55: Verifying HOCOMM User



Synchronizing FedEx Islander PLUS FMS

To synchronize the FedEx Islander PLUS FMS, proceed as follows:

- 7 After completing hardware installation and software configuration, contact Travis Langston (or delegated person) at 1-870-704-5230 to begin the syncing process.
- 8 Provide the FedEx Location Name information when calling for a download.
- 9 End User set up.
At this time... End Users will not have access to the FHO or SITE application. All access will be controlled specifically by the FedEx headquarters.

Test Sequences

After completing hardware installation and software configuration, test each pump and verify transaction details.

Testing Procedure for Pumps

To test the pumps, proceed as follows:

- 1 Verify the fuel price has been downloaded to the SiteOmat from the FHO and is set to \$1.000.
- 2 Ensure pumps are no longer in bypass mode.
- 3 Run a transaction using a T-Check Card. Record the transaction information and verify the following:
 - Transaction information is captured correctly in the SiteOmat Status screen.
 - Quantity is recorded correctly and matches the pump.
 - Correct pump numbers and nozzle numbers are displayed in the SiteOmat Status screen.

Finalizing Installation

To ensure that the installation is complete, the Gasboy Fleet PLUS system must be online and communicating with the FHO, and all the dispensers and satellites must be online and operational.

Commission all serialized equipment (Islander PLUS and FiPay Server) to close the Installation Service Request with Gilbarco Claims. Have this information available before communicating. You are also expected to commission and close the installation with Gilbarco Claims before leaving the facility.

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Appendix A: Commissioning

*All installations for the FedEx Islander PLUS FMS require signed verification that the installation is complete and the customer is satisfied. Per the ASC Notification Letter, no payment will be remitted to the installer until required documentation is received.

- ☐ AC Power confirmed to be within specification. Test at Idle. For more information, refer to "Pre-installation Power Inspection" on page 3-1.
- ☐ Neutral to Ground: measured at: _____ (fill in value).
- ☐ Hot to Ground: measured at: _____ (fill in value).
- ☐ Hot to Neutral: measured at: _____ (fill in value).
- ☐ AC Power confirmed to be within specification. Test at load (ALL PUMPS ON). For more information, refer to "Pre-installation Power Inspection" on page 3-1.
- ☐ Neutral to Ground: measured at: _____ (fill in value).
- ☐ Hot to Ground: measured at: _____ (fill in value).
- ☐ Hot to Neutral: measured at: _____ (fill in value).
- ☐ Fleet Manager trained in operation and manual bypass.
- ☐ FiPay Server ground cable installed.
- ☐ Program the SiteOmat.
- ☐ Reboot SiteOmat.
- ☐ Pumps and oil reels blocked and unblocked as needed.
- ☐ Set up networking in the FiPay Server.
- ☐ Set up T-Check information in the FiPay Server.
- ☐ Perform all tests per the "Test Sequences" on page 4-33.
- ☐ Commission equipment with Gilbarco claims via the Gilbarco extranet (<http://www.gilbarco.com/interactive/login.cfm>), log into your account. If you do not currently have access to the extranet, see your company gatekeeper for a username and password.

The Gasboy Fleet Plus system is operational and equipment has been commissioned with the Gilbarco Claims Department.

Signature of Installer: _____

Signature of Fleet Manager/Director: _____

Date: _____

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Appendix B: Multiple Controller Sites


Installing Multiple Controller FedEx Islander PLUS FMS

To keep pump numbering consistent with the existing scheme, extra pumps need to be added to the system. Unused pumps will be blocked in the SiteOmat.

For example,

- A site has two Islander PLUS systems and two pumps and oil reels.
- There are two islands each with an Islander PLUS controlling, a pump and an oil reel.
- Pumps are numbered 1 - 2. Oil reels are numbered 3 - 4.

Figure B-1: Pump Status - SiteOmat and Terminal Block



The screenshot shows the 'Pumps' tab in SiteOmat. A table lists four pumps with their status (green for active, grey for blocked) and associated data.

Pump	Dollars	Gallon	Emp/Veh	Nz	Fleet
1	0.00	0.000		1	
2	0.00	0.000		1	
3	0.00	0.000		1	
4	0.00	0.000		1	



Pump #1


Oil Reel #3

(i) In the SiteOmat, if Pumps 2 and 4 are blocked, Pumps are wired at slots 1 and 3 in the Terminal Block.



The screenshot shows the 'Pumps' tab in SiteOmat. A table lists four pumps with their status (green for active, grey for blocked) and associated data.

Pump	Dollars	Gallon	Emp/Veh	Nz	Fleet
1	0.00	0.000		1	
2	0.00	0.000		1	
3	0.00	0.000		1	
4	0.00	0.000		1	



Pump #2

Oil Reel #4

(ii) In the SiteOmat, if Pumps 1 and 3 are blocked, Pumps are wired at slots 2 and 4 in the Terminal Block.

Gasboy 9800 Series Pumps Business Inventory Reconciliation (BIR) Set Up

Gasboy 9800 Series pumps need to be wired as mechanical pumps to maintain the BIR interface to the tank gauge as shown in [Figure B-2](#) and [Figure B-3](#) on [page B-3](#).

Figure B-2: Gasboy 9800 Series Pumps BIR Set Up - 1

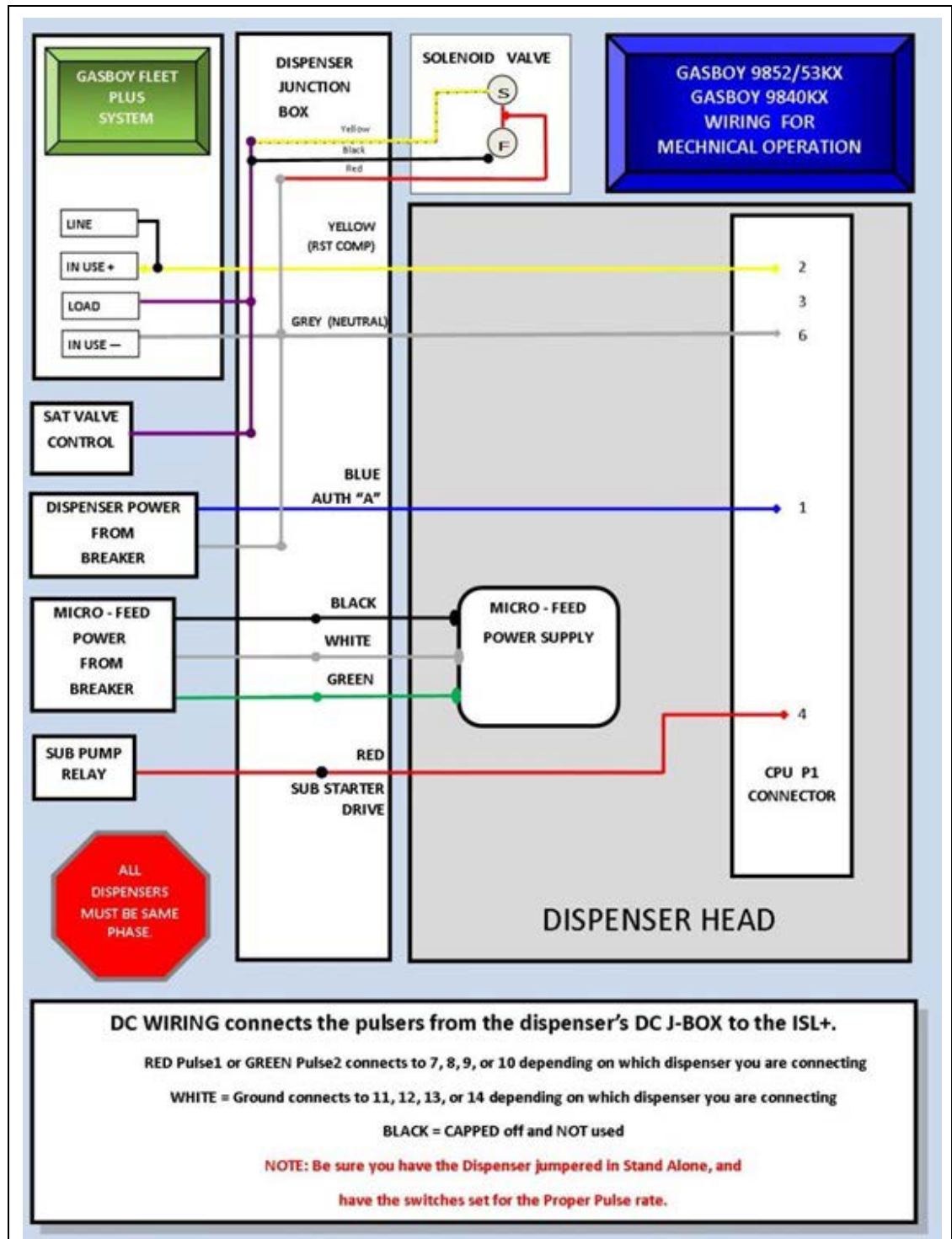
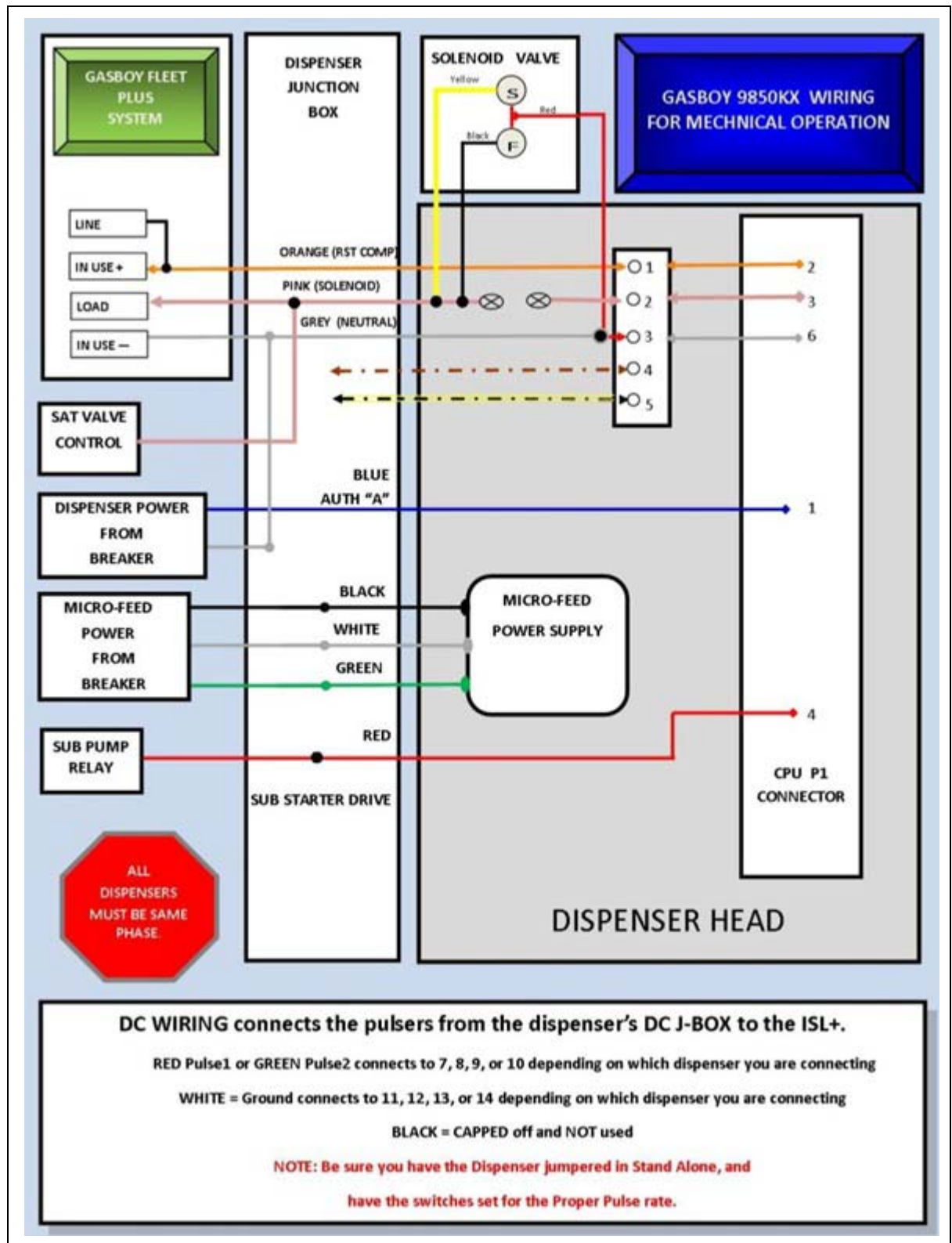


Figure B-3: Gasboy 9800 Series Pumps BIR Set Up - 2



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Appendix C: FedEx Project Site Information Form (Example Only)



FedEx Project Site Information Form

Following is the necessary information about the installation of 8 HOSE ISL+ w/FiPAY system for Federal Express Freight. You will be provided a play book with all the necessary instruction that along with this information will allow you to successfully complete the installation.

Take a few moments before you go to the site to read through this as well as the playbook. If you have any questions or concerns, do not hesitate to call us so we can work through them before the day of installation.

GVR Site ID - 125644

Site Specific Information (You will need a separate one of these for each ISL + units).

OrCU Lan 2 IP Address	OrCU Lan 2 Subnet Mask	OrCU Lan 2 GW (Gateway)	SiteOmat Station Description	SiteOmat Station Code	Fipay ALPHA Code	Fipay Port No.	Fipay Server IP Address	Fipay Server Subnet Mask	Fipay Server Gateway	Fipay Site No.
XX.X.X.XX	XXX.XXX.XXX.X	XX.X.X.X	XXXXXXX	XXXXXX	XXX	XXXXX	XX.X.X.XX	XXX.XXX.XXX.X	XX.X.X.X	XXXXX

Note: This table is ONLY a sample.

Tasks to Perform While On-site

- ✓ Inspect site for any obvious problems with Wiring, Hoses, Nozzles and so on. Alert Project Manager immediately in the event issues are found you feel will not allow you to complete the project at this time.
- ✓ Verify proper operation of existing equipment.
- ✓ Verify E-Stop is working properly.
- ✓ Verify you have all required Equipment/Tools/Supplies/Personnel to complete the work before you begin.
- ✓ De-energize all power to existing island card reader and remove existing FMS system.
- ✓ Clearly mark all wiring to existing system.
- ✓ Install new ISL+ unit and wire.
- ✓ Install FiPAY server retrofit kit into ISL+ unit.
- ✓ Power up unit and program unit as per Playbook.
- ✓ Verify proper operation.
- ✓ Train on-site personnel on proper operation.

Important Contact Information	
Gilbarco/Gasboy	FedEx Freight Corporate Offices
Bob Griffith - 1.336.547.5654 Gasboy TAC - 1.800.444.5529	Travis Langston - 1.870.704.5230 Justin Hudson - 1.870.416.6482

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7300 West Friendly Avenue · Post Office Box 22087
Greensboro, North Carolina 27420

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