

# Freedom Easy Pump

## Verifone with Cybera EZR Setup Guide

First Data  
Heartland



***Freedom***  
**ELECTRONICS**

This guide provides detailed instructions on how to configure the Cybera Enhanced Zone Router, Verifone Commander/RubyCi, FA80 Bridge, and the wireless access point for use with the Freedom Easy Pump. Technicians must be VASC certified.

You will need a laptop with a functional ethernet adapter and wireless capability, and the Managers login for the Configuration Client.

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## 1. Determine the IP Scheme

The FA80 Bridge will be X.X.X.**54**.

The Cybera WAN1 will be X.X.X.**200**.

*Note: Verify this IP does not conflict with the Isolated Payment NIC IP*

You will need to know the IP Scheme of the internet service provider that the equipment will be connected to.

To determine the IP scheme that will be used:

1. Connect your laptop to the store router and set your laptop up to “*Obtain an IP address automatically*”.
2. Run *ipconfig* in the Command Prompt. The Default Gateway IP is the scheme you will follow.

According to the example below:  
The Default Gateway is 192.168.0.1

Which will make:  
The FA80 Bridge 192.168.0.54  
The Cybera WAN 192.168.0.200

```
Command Prompt
C:\Users>ipconfig

Windows IP Configuration

Ethernet adapter Ethernet:

    Connection-specific DNS Suffix  . : satx.rr.com
    IPv6 Address. . . . . : 2603:8081:406:d600::1
    IPv6 Address. . . . . : 2603:8081:406:d600:bc51:e624:b404:5793
    Temporary IPv6 Address. . . . . : 2603:8081:406:d600:60ad:ae71:25ca:b453
    Link-local IPv6 Address . . . . . : fe80::bc51:e624:b404:5793%9
    IPv4 Address. . . . . : 192.168.0.7
    Subnet Mask . . . . . : 255.255.255.0
    Default Gateway . . . . . : fe80::3668:95ff:fef6:6d49%9
                               192.168.0.1
```

**In this document, we assume the Gateway is 192.168.1.1**



## 2. Program the Commander/RubyCi

In this section we will setup the Commander to accept Mobile Payments for The Easy Pump.

Note: Always pull a backup before and after you perform the install.

Note: We highly recommend checking and/or replacing the battery at this time.

Note: You will be required to generate an OTP password for network changes.

Minimum Base 51 is required for First Data and Heartland

1. Login to the Configuration Manager in the CSR Functions of the register, or by accessing the Configuration Client at the following address:

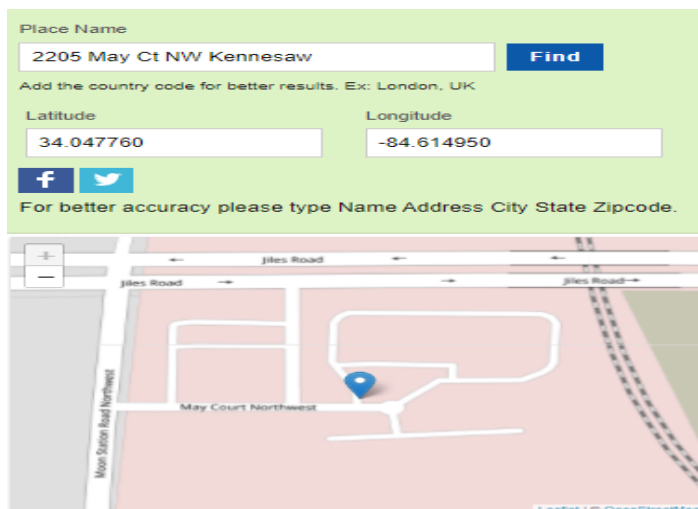
<https://192.168.31.11/ConfigClient.html>

Username: *Manager*

Password: *\*\*current manager password\*\**

2. Determine the site's Latitude and Longitude. There are many ways to do this, including using Google Maps. Here we use Latlong.net, after entering the street address you will find the coordinates.

[latlong.net](http://latlong.net)



Place Name  
2205 May Ct NW Kennesaw

Add the country code for better results. Ex: London, UK

Latitude Longitude  
34.047760 -84.614950

For better accuracy please type Name Address City State Zipcode.

Map view showing Jiles Road, May Court Northwest, and a location pin.

3. Navigate to Payment Controller > Mobile Payment Configuration > Site Mobile Configuration. See figure 1 on page 5.

Check “Accept Mobile Payments”

Enter the following and SAVE.

- Site Name: *Enter Store Name*
- Welcome Message: *Welcome*
- Data Storage Time(in Days): *30*
- Site Address: *Enter street address*
  - Latitude: *Enter Latitude*
  - Longitude: *Enter Longitude*
  - Report: *Leave at default*

4. Navigate to Payment Controller > Mobile Payment Configuration > Host Configuration. See figure 2 on page 5.

Check “Enable Host”

Enter the following and SAVE:

- Adapter: *VFI Mobile*
- Program Name: *EASYPUMP*
  - Merchant ID: *mppa2-mer*
- Authentication Type: *Display Token*
  - Store ID: *mppa2-store*
  - Settlement Employee#: *5577*
  - Settlement Passcode: *633225*
- Phone Number: *Enter site phone number*
- Address: *192.168.1.54 (following sites IP scheme)*
  - Port: *4710*
  - Do *NOT* Check SSL Enabled
    - Heartbeat Frequency: *45*
    - Heartbeat Time Unit: *Seconds*
- Outdoor PreAuthorization Timeout (In Secs): *180*
- Site Initiated Loyalty: *Never Allow Site Entered Loyalty*

Site Mobile Configuration Host Configuration

Accept Mobile Payments

Site Configuration

Site Name

Welcome Message

Misc Configuration

Data Storage Time(In Days)

Site Address

Latitude

Longitude

Report  Format

Figure 1 Site Mobile Configuration

Site Mobile Configuration Host Configuration

Add  Delete

1 - EASY PUMP

Enable Host

Host Configuration

Adapter

Program Name

Merchant ID

Authentication Type

Site Terminal ID

Location ID

Store ID

Settlement Employee Number

Settlement Passcode

Phone Number

Send Loyalty Details

Network Configuration

Address(IPv4 Format/Domain Name)

Port

SSL Enabled

Heartbeat Frequency

Heartbeat Time Unit

Misc Configuration

Outdoor PreAuthorization Timeout (In Secs)

Site Initiated Loyalty

Figure 2 Host Configuration



5. Navigate to Store Operations > Payment Management > MOP.  
See figure 3 on page 7.

Enter the following and SAVE:

- Select the MOBILE MOP (position 012)
  - Change Name to: *EASYPUMP*
    - MOP Code: *28 – MOBILE*
      - Minimum Amount: *0.00*
      - Maximum Amount: *0.00*
        - Limit: *0.00*
      - Additional Receipts: *0*
      - Tender Code: *Generic*
      - Tender Sub Code: *Generic*
  - Check: *Allow Zero Entry and Allow Refund*

6. Navigate to Initial Setup > Local Area Network Configuration > Device Specific Routes. See figure 4 on page 7.

*Select New*

Enter the following and SAVE.

- Route Type: *Host*
- Destination: *192.168.1.54 (following sites IP Scheme)*
  - Gateway: *192.168.31.31*
  - Netmask: *255.255.255.240*
    - Service: *EasyPump*

7. Cycle power to the Commander/RubyCi.

MOP
Currencies
Fees
Tax Rates

Delete

Select MOP

- 001 - CASH
- 002 - CHECK
- 003 - CREDIT
- 004 - DEBIT
- 005 - MAN CRED
- 006 - IN-HOUSE
- 007 - MAN DEBIT
- 008 - FOODSTAMP
- 009 - LOTTERY
- 010 - DRIVE OFF
- 011 - COUPON
- 012 - EASYPUMP
- 013
- 014
- 015
- 016
- 017
- 018
- 019
- 020

Name:

MOP Code:

Minimum Amount:

Maximum Amount:

Limit:

#Additional Receipts:

Tender Code:

Tender Sub Code:

**Options**

Force Safe Drop

Open Drawer On Sale

Tender Amount Required

Cashier Report Prompt

Allow Zero Entry

Allow Without Sale

Allow Refund

Allow Change

Allow Safe Drop

Allow Money Order Purchase

Force Ticket Print

Figure 3 MOP

**Device Specific Routes**

Route Type	Destination	Gateway	Netmask	Service
host	50.200.100.01	100.100.01.01	255.255.255.255	Commander Console
host				VHQ
host				/HQ Fail Over
host				riCenter(VRSD)
host				Alt IP1 of riCenter(VRSD)
host				Alt IP2 of riCenter(VRSD)
host	192.30.100.118	192.168.31.31	255.255.255.255	Alt IP3 of VeriCenter(VRSD)
				Commander

**New Route Config**

Route Type:

Destination:

Gateway:

Netmask:

Service:

Figure 4 Device Specific Route



## 3. Program the Cybera Router

1. Connect your laptop to a Cybera Router Lan port.
2. Open a browser and go to <https://192.168.31.31>
3. Log into the Cybera Router

Username: zonerouter  
Password: cyberasca

If the above default login does not work, you may have to reset the Cybera by holding the reset button for 30 seconds.  
We recommend having a spare, operational Cybera EZR on hand.



4. Select the WAN tab and enter the following:  
See figure 5 on page 10.

- Type: *Static*
- IP Address: *192.168.1.200*
  - Mask: *255.255.255.0*
  - Gateway: *192.168.1.1*
    - DNS1: *8.8.8.8*
    - DNS2: *8.8.4.4*

*Note: The IP and Gateway will follow the site IP scheme.*


5. Select the Port Forwarding tab

6. Click  Rule after the last entry.

7. Enter the following:  
See figure 6 on page 10.

- Src Interface: WAN
- Dst. IP Address: 192.168.31.11
- Forward Port: 4710
- Destination Port: 4710

8. Select the Static Route tab

9. Click  Rule after last entry

10. Enter the following:  
See figure 7 on page 10.

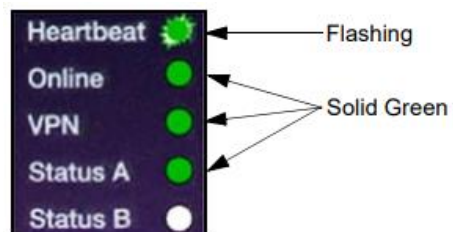
- Dst IP Address: 192.168.1.54
- Dst Mask: 255.255.255.255
- Gateway: 192.168.1.200

*Note: The IP and Gateway will follow the site IP scheme.*

11. Go to the bottom of the page and click Save Changes.  
The Cybera Zone Router will reboot.

12. Connect WAN1 to an ethernet port on the network switch.

You should see these LEDs  
for proper communication.



13. Verify proper POS operation.

SCA Configuration

WAN LAN Port Forwarding Static Routes Remote Logging Scanning Configuration

Type

IP Address

Mask

Gateway

DNS 1

DNS 2

Figure 5 WAN

SCA Configuration

WAN LAN Port Forwarding Static Routes Remote Logging Scanning Configuration

Rule 7

Src Interface

Forward Port

Dst IP Address

Destination Port

Figure 6 Port Forwarding

SCA Configuration

WAN LAN Port Forwarding Static Routes Remote Logging Scanning Configuration

Route 1

Dst IP Address

Dst Mask

Gateway

Figure 7 Static Routes

## 4. Install the Wireless Access Point

1. Connect an ethernet cable from the Store's ISP to the provided network switch.
2. Connect an ethernet cable from the network switch to the LAN port on the PoE adapter.
3. Run an ethernet cable from the PoE port on the PoE adapter to the front of the store, where the Access Point will be installed.
4. Temporarily mount the Access Point inside the store nearest the dispensers.  
**Location is critical - See the Wireless Access Point Tips Guide** available on the Freedom Electronics website. Mount it as high as possible and with the least amount of obstructions to the dispensers as possible. The Access Point's wireless signal must reach the FIM-20's at each dispenser.
5. Power up the Access Point by connecting the PoE adapter to a power plug. We recommend using a conditioned power outlet, preferably a power receptacle protected with a UPS for the Access Point and all other equipment.
6. You should now have a wireless network named "EASYPUMP".
7. Download a WiFi analyzer app. for your laptop or smart phone, such as the free edition of NetSpot.
8. With the Access Point temporarily in place, walk around each dispenser and take note of the signal strength that you experience. We recommend a signal strength greater than -60dBm at each dispenser, but signals may vary.
  - Signal strengths above **-60 dBm** are recommended for proper operation.
  - Signal strengths between **-67 and -60 dBm** may work but could encounter issues.
  - Signal strengths below **-68 dBm** are generally unusable.

**SIGNAL STRENGTH IS VERY IMPORTANT AND MUST BE VERIFIED.**

9. Relocate or adjust the position of the Access Point as needed.
10. Once proper signals are met, permanently mount the Wireless Access Point.



## 5. Program the FA80 Bridge

1. Using an ethernet cable, connect the FA80 Bridge to the network switch.

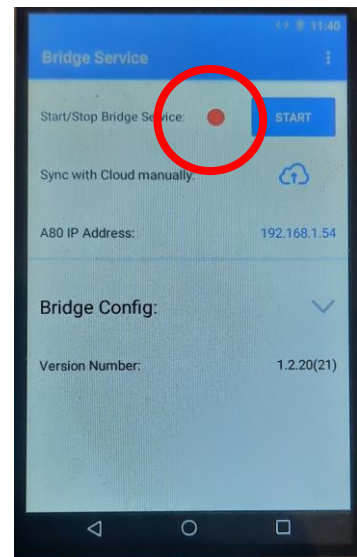
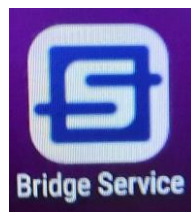
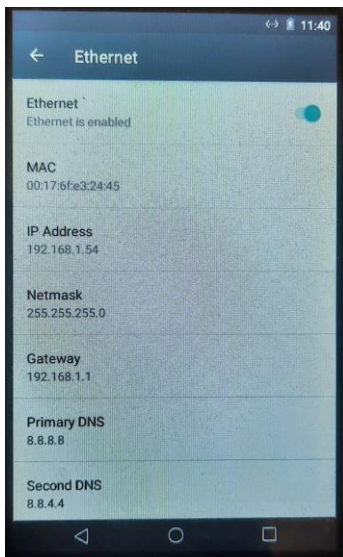
2. Open Settings and configure: (Password: pax9876@@)

- Disable Wi-fi
- Disable Bluetooth
- Enable Ethernet
- IP Mode: Static
- IP Address: 192.168.1.54 (*following sites IP scheme*)
  - Netmask: 255.255.255.0
- Gateway: 192.168.1.1 (*following sites IP scheme*)
  - Primary DNS: 8.8.8.8
  - Secondary DNS: 8.8.4.4

Select Save and close settings.

3. From the FA80 Bridge desktop, open the Bridge Service Application.  
Password: Today's date MMDDYYYY *Note: This may be tomorrow's date according to UTC.*

4. Select Start - The Bridge service should start and the indicator should turn Green



## 6. Install Easy Pump Dispenser Kits

At this point, you are ready to install the dispenser kits.

Please follow the appropriate dispenser install manual available on the Freedom Electronics website.

Wayne Ovation Install Manual  
Wayne Vista Install Manual  
Gilbarco Advantage Install Manual  
Gilbarco 300/500 Install Manual  
Gilbarco 500S/700S Install Manual

We recommend installing a kit into the first dispenser and verify operations before moving onto any others.

The site will be able to run on dual systems, the new Easy Pump and the existing DCR's. This allows one dispenser at a time to be upgraded without affecting the other dispensers. This will require removing current DCR programming as you upgrade dispensers.



## 7. Remove DCR programming

1. Log into the Configuration Manager of the Commander/RubyCi.
2. Navigate to Forecourt > Fuel > Fuel Config – Pending > Fueling Positions.  
See figure 8 on page 15.

***Uncheck ‘DCR In Dispenser’ for each upgraded fueling position and SAVE.***

3. Navigate to Tools > Managed Modules > Current Configurations > Host Names - sitecontroller > Select Module - DCR Driver > DCR Positions – Advanced Settings.  
See figure 9 on page 15.

***Remove the channel programming for each upgraded DCR Position and SAVE.***

4. Initialize Fuel and DCR's.

The Easy Pump should now be operational at each upgraded fueling point.

Once all fueling points have been upgraded to  
The Easy Pump, remove the DCR driver.

5. Navigate to Tools > Managed Modules > Current Configurations > Host Names – sitecontroller > Select Module – DCR Driver > DCR Channel 01 – Advanced Settings. See figure 10 on page 15.

*Remove DCR Family type  
Remove Port Name  
Uncheck Enable and SAVE*

6. Initialize Fuel and DCR's, including Drivers.



### Options

<input type="checkbox"/> Auto Approval	<input type="checkbox"/> Auto Disapproval	<input type="checkbox"/> DCR In Dispenser
<input type="checkbox"/> First In First Out	<input type="checkbox"/> DCR Prompt Preset Amount	<input checked="" type="checkbox"/> Handle Up Calling
<input type="checkbox"/> Ignore Pump Error	<input type="checkbox"/> Pay At Pump Only	<input checked="" type="checkbox"/> Prepay Only
<input checked="" type="checkbox"/> Preset Postpay	<input checked="" type="checkbox"/> Preset Prepay	<input type="checkbox"/> Stacking
<input type="checkbox"/> View Buzzer Off		

Figure 8 Fueling Positions

### Managed Modules

Current Configuration Pending Configuration System Resources

Host Names

Select Module

DCR Positions

DCR Channel 01

#### DCR Positions

1	<input type="text"/>	2	<input type="text"/>	3	<input type="text"/>	4	<input type="text"/>
5	<input type="text"/>	6	<input type="text"/>	7	<input type="text"/>	8	<input type="text"/>
9	<input type="text"/>	10	<input type="text"/>	11	<input type="text"/>	12	<input type="text"/>
13	<input type="text"/>	14	<input type="text"/>	15	<input type="text"/>	16	<input type="text"/>
17	<input type="text"/>	18	<input type="text"/>	19	<input type="text"/>	20	<input type="text"/>
21	<input type="text"/>	22	<input type="text"/>	23	<input type="text"/>	24	<input type="text"/>

Figure 9 DCR Positions

### Managed Modules

Current Configuration Pending Configuration System Resources

Host Names

Select Module

DCR Positions

DCR Channel 01

DCR Channel 02

DCR Channel 03

DCR Channel 04

DCR Channel 05

DCR Channel 06

#### DCR Channel 01

Enable

IP Enabled

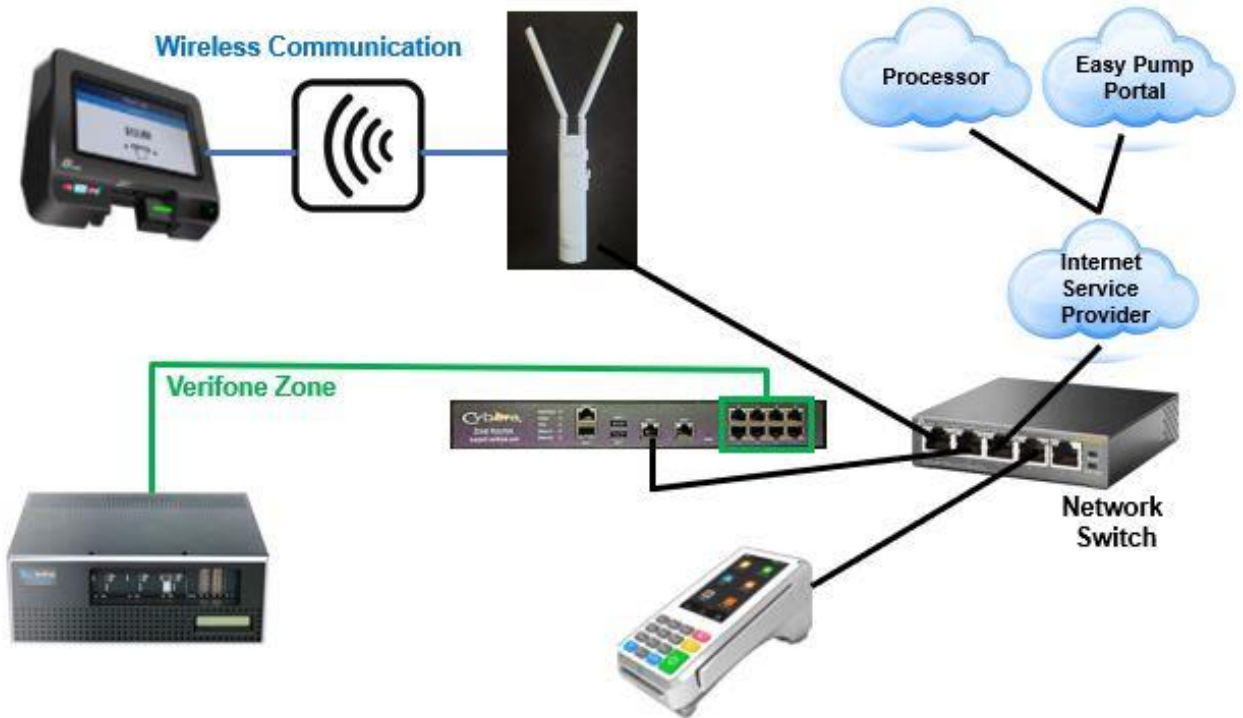
Port Name

DCR Family type

Figure 10 DCR Channel



## 8. Network Diagram



### NETWORK SWITCH

CYBERA WAN 1  
FA80 BRIDGE LAN  
WIRELESS ACCESS POINT  
INTERNET SERVICE PROVIDER

### CYBERA

WAN 1 - NETWORK SWITCH  
LAN PORTS - VERIFONE ZONE