

Portal TI+® EMV 6800 Upgrade Manual



DRB

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Introduction

This manual was designed to go over the installation of Portal TI+ EMV Reader 6800, including software information done prior to installation, previous hardware removal and EMV settings done in Sierra.

Tools Required

- 11/32" Nut Driver
- 5/16" Nut Driver
- 3/8" Nut Driver
- 5/16" Open End Wrench or Small Adjustable Wrench
- #2 Philips head Screwdriver (PH2)

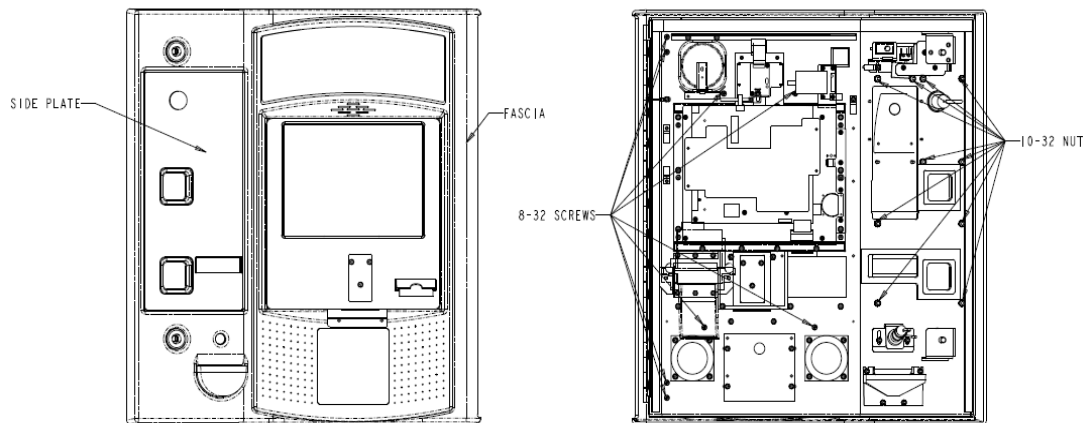
General Process

- Update Portal TI+ Software
- Change the Fascia.
- Remove Old Card Reader & Loosen Modem Bracket
- Install VP6800 Card Reader, PDC Modem & Network Switch
- Remove any existing Line Splitters
- Connect Cables
- Attach to existing Store Network
- Set up EMV settings in Sierra.
- Test a credit card transaction.

Removing Components

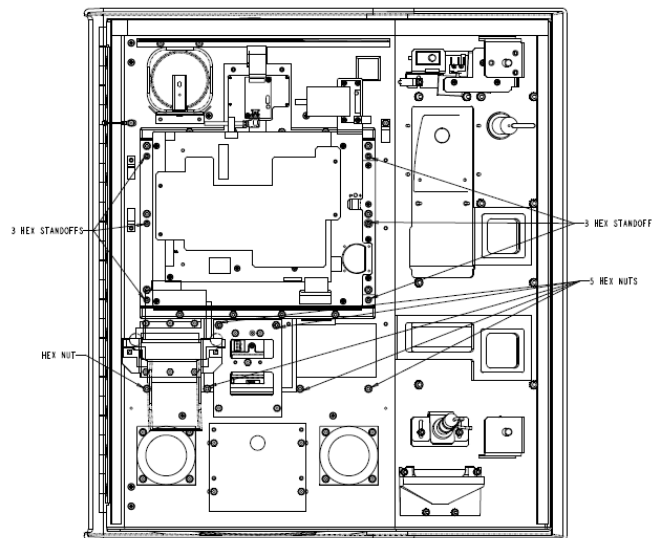
Changing Main Fascia

1. Remove side plate by removing (10) 10-32 lock nuts 3/8" nut driver, then unscrew (8) 8-32 screws to remove old Fascia. Save fasteners. See figure below.
2. Replace the display plate overlay. (This step is optional).
3. Add new fascia and attach, using (8) 8-32 screws, leave loose. Attach side plate with (10) 10-32 nuts. Tighten all fasteners after the Credit reader assembly is fully attached in later steps.



Replacing Display Plate

To replace display plate, remove (6) hex standoffs around the display and (6) hex nuts below the display. Do this at the same time you are replacing the Fascia.

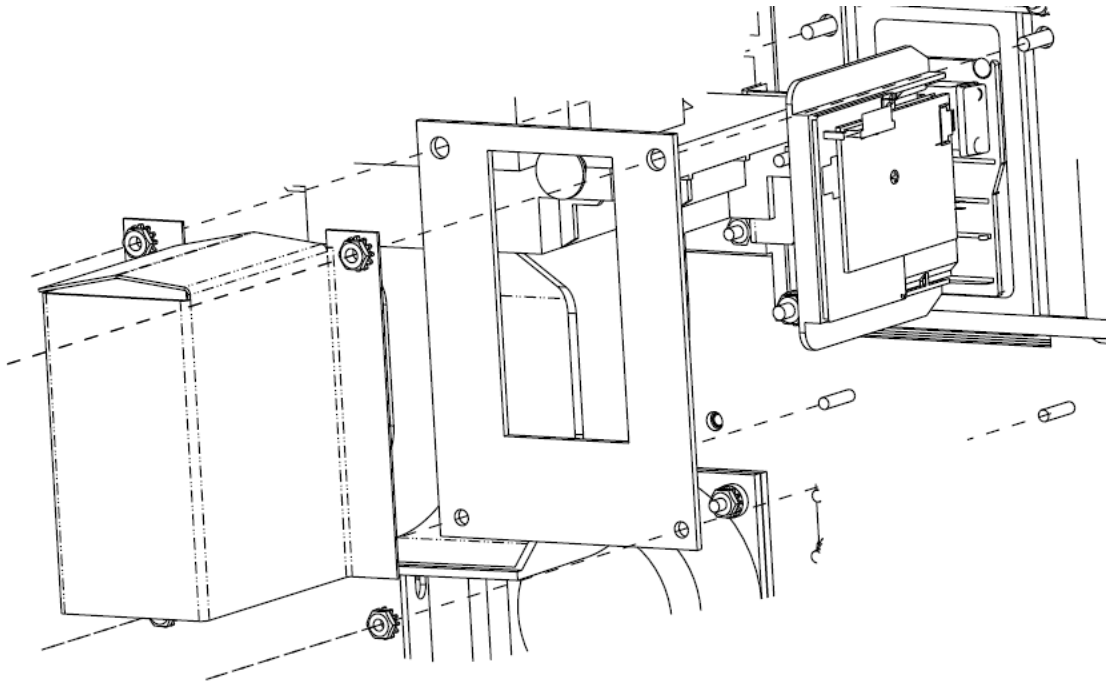


Verifone XML Credit sites

If the site is using XML Credit, you will have to remove SA2402 (Verifone) or the SA3030 (Gilbarco) Linksys Router from the In Store network. The kiosk entry system will not have a Datacom Modem to remove. Prior to servicing, you will need to have the site set up for a merchant account.

Card Reader

1. Turn Power off on Unit.
2. Open door to Kiosk, locate card reader on the inside of the door, remove the cable connector connecting to the top of the card reader. Tie wrap securely to the harness above the reader slot.
3. Remove the four corner nuts from the rear of the card reader (retaining the cover and plate) with a bottom 11/32 & top 5/16 Nut driver.

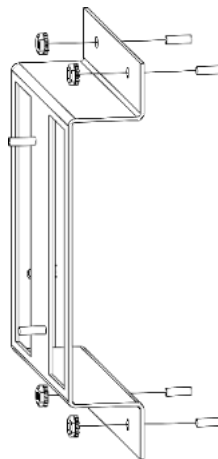


Modem bracket

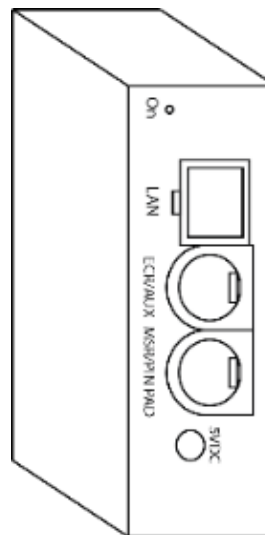
Only complete these steps if you currently have Datacap IPTran installed.

1. Locate the 4 nuts used to mount the modem. This can be found on the top right of the unit, on the upper left side of the CPU assembly.
2. Use a 5/16 nut driver to remove the 4 nuts and bracket that mount the modem. Retain the nuts.

Note: Some units may not have the bracket, or the modem may not be mounted inside the bracket. Other units will have no modem nor bracket because the unit may include a Gilbarco Link for Credit Card authorization.



3. The modem should have the LAN (Ethernet) connection removed and the remaining cables left connected. If there is a label covering the MSR/Pin pad connection, you will need to remove it.

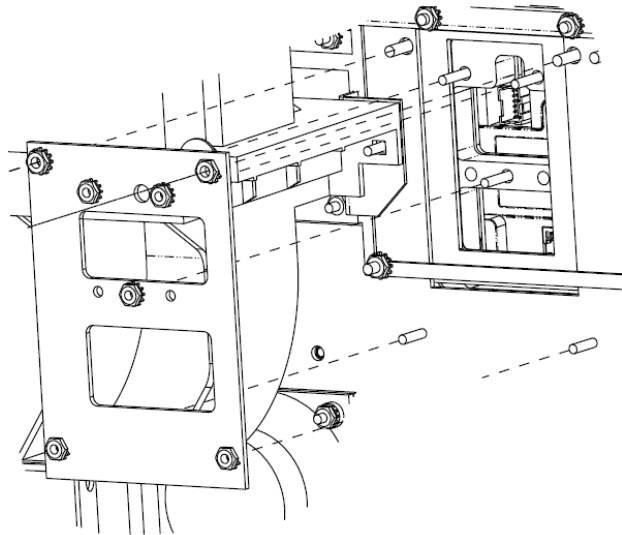


Hardware Installation

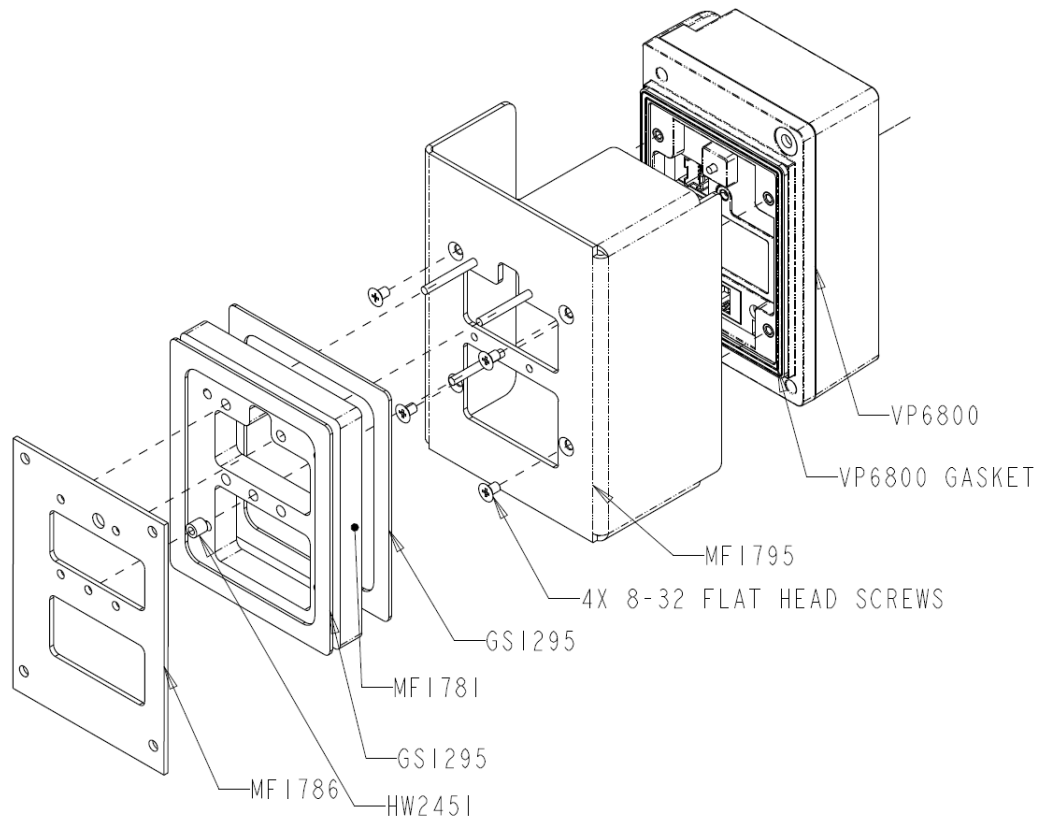
This section will go over installing new components.

VP6800 EMV Card Reader

1. Locate MF1786 plate. This is the metal plate that does NOT have the 3 studs protruding from one side.
2. Place the plate onto the 4 studs on the rear door that match up with the 4 outer mounting holes. (2) 8-32 studs at top and (2) 6-32 studs at the bottom. The larger off center hole should be toward the top left of center.
3. Secure the plate to the door using (2) 8-32 Locknuts on top and (2) 6-32 locknuts at the bottom.



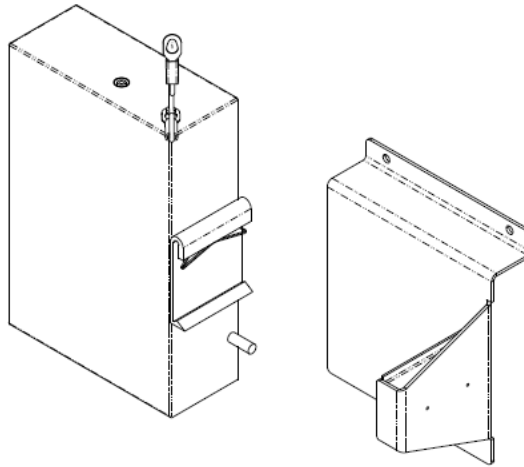
4. Remove the Reader from its box. Verify the Reader has a black gasket on the back of it. The gasket provides a rain seal between the reader and the metal plate it is mounted on. If it falls off during installation, note the gasket has a part that sits inside the channel in the plastic rear of the VP6800 reader (like desk/table T molding).
5. Locate the MF1795 bracket (side impact bracket). This will have 3 studs sticking out and a gasket mounted onto the back side with the studs.
6. Install MF1795 bracket onto rear of the VP6800 EMV reader using (4) 8-32x3/4" Flat Head Stainless Steel screws and a #2 Phillips head screwdriver. **DO NOT USE** the 4 pan head screws that came in the reader box. The three mounting studs that stick out should be on the TOP half of the plate facing the rear. If installed correctly, you should be able to see the RJ45 network jack as well as the white 2x6 Power/Serial Jack on the back of the VP6800.



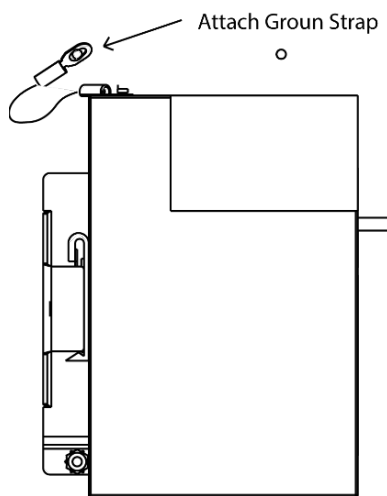
7. Verify (2) 8-32 Nuts and (2) 6-32 nuts are secure on MF1786 to the inside of the door. Leave loose.
8. Make sure HW2451 is tightened on center stud of MF1795 against MF1781. Make sure the power cable goes through the top cut out and network cable goes through the bottom cut out of MF1786.
9. Attach the cables before inserting the VP6800 reader from the front of the door so that the three studs of the MF1795 fit the matching holes on the top half of the MF1786. Secure the studs to MF1786 using (3) 6-32 nuts and a 5/16" nut driver.
10. Now tighten all the fasteners for the card reader and Fascia.

Network Switch Bracket Assembly

1. Secure the Network Switch plate assembly onto the lower left of the right wall of the coin cage using the bottom two studs (below modem bracket). Use (2) 6-32 nuts and a 5/16 open end wrench to tighten.

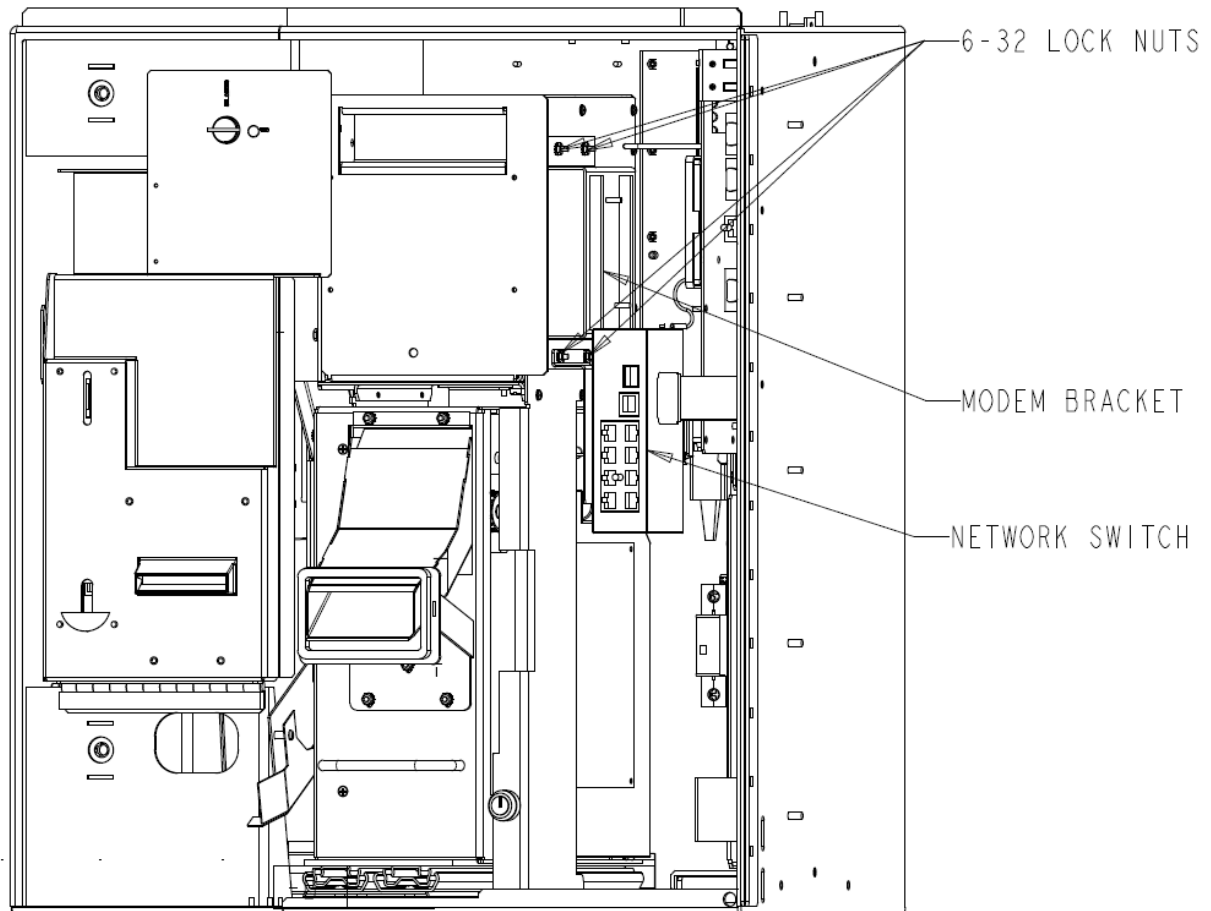


2. Secure the grounding wire to the top right stud in front of CPU assembly using a 6-32 nut and a 5/16" nut driver.



3. Place the modem in the bracket located above the Switch, the connectors should be facing forward.
4. Plug the power cord splitter into the right outlet.

5. Plug the Modem power supply into the left outlet on the power panel.
6. Plug the 48V power supply for the switch into the top of the Switch then into the power splitter.
7. Plug 5V power supply SA2708 from the kit into the into the power splitter and the green connector of CA2459.



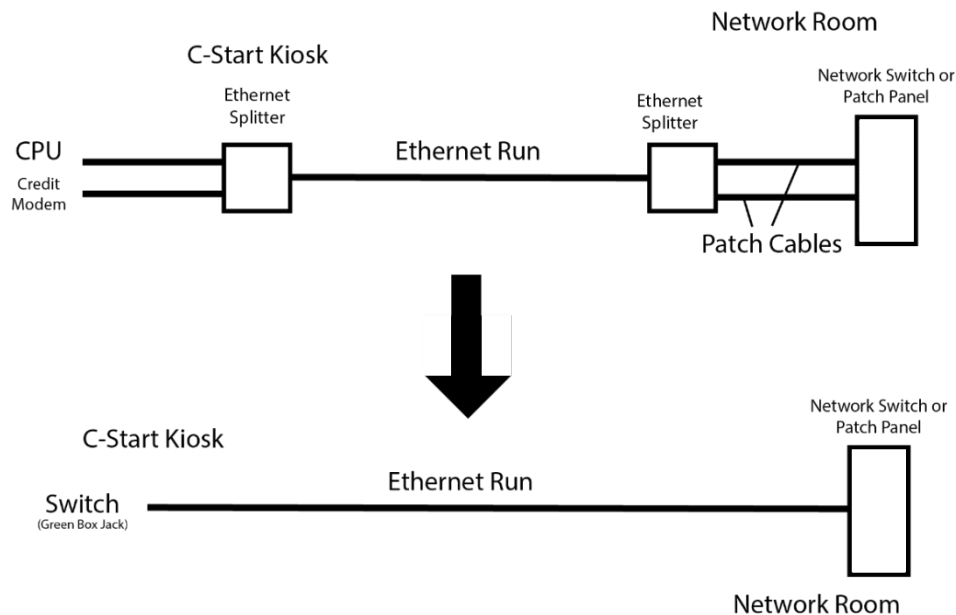
Removing Ethernet Splitter

1. If there is currently an Ethernet Splitter installed that turns one Ethernet line into two, you **MUST** remove the splitter from both sides of the line. Remove the splitter from inside the Portal TI+ cabinet and the C-store/Network room. If a splitter is installed, it may look like the image shown below or similar.
2. If there are 2 separate Ethernet runs, you will simply need to hook one up to the Routers Green Box Jack.



Ethernet splitter

3. Plug one end of the single Ethernet Cable back into the Router in the C-store and the other into the Green Boxed Jack on the Switch installed into the Portal TI+.





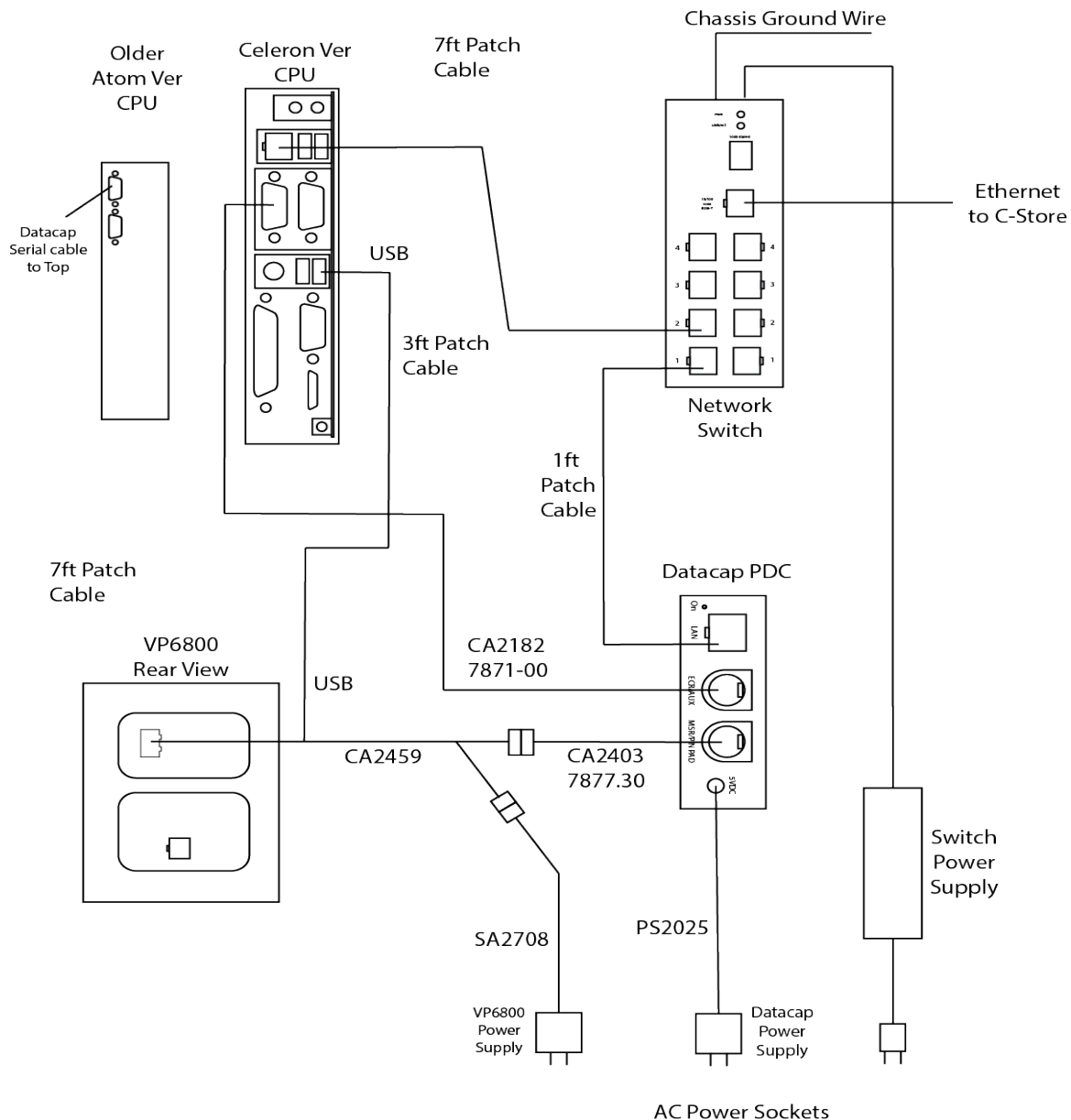
Split Ethernet Run

In some locations, you may find that there are two Ethernet cable runs to the Kiosk. One of these cables goes to the DRB/Unitec Linksys router and the other to the C-store network (bypassing the Linksys). In this case, be sure to use the line that goes to the Linksys router and not the line that bypasses the Router.

Cable Connections

Follow the Diagram below to connect the remaining cables. If there are two Ethernet cables going back to the C-Store, you should only connect one into the Switch. Follow the Cable Routing guide on the following page. (Note: If your kit was shipped with two 7-foot patch cables, you may substitute that cable for a 3-foot patch cable.)

VP6800 EMV Retrofit Kit Connection Diagram Portal



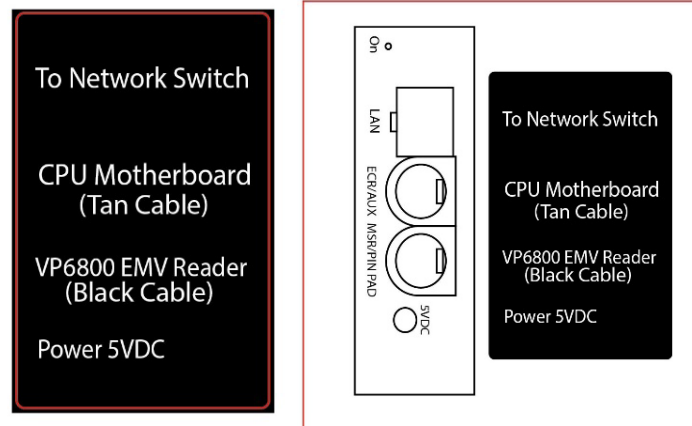
Cable Routing Guide

1. Use the tie wraps included in your kit to tie the new cables to the existing cable runs. Cables should not be loosely draped over components or equipment as they can become prone to snags.
2. Make sure the cable that runs along the door hinge can move freely. The cable should be tie wrapped on both sides of hinge so that opening and closing door does not flex or pinch the connectors going to the VP6800 EMV reader.

Installing Labels

Labels may have been included in your kit. To properly install them:

1. Place the smaller black label on the side of the Datacap Modem. Make sure the text for “To Network Switch” aligns with the RJ45 Network Jack.
2. Place the larger label on the right wall of the cabinet. The label should be visible near the Modem.



MN1017 1.79.13 Thumb Drive Update Instructions

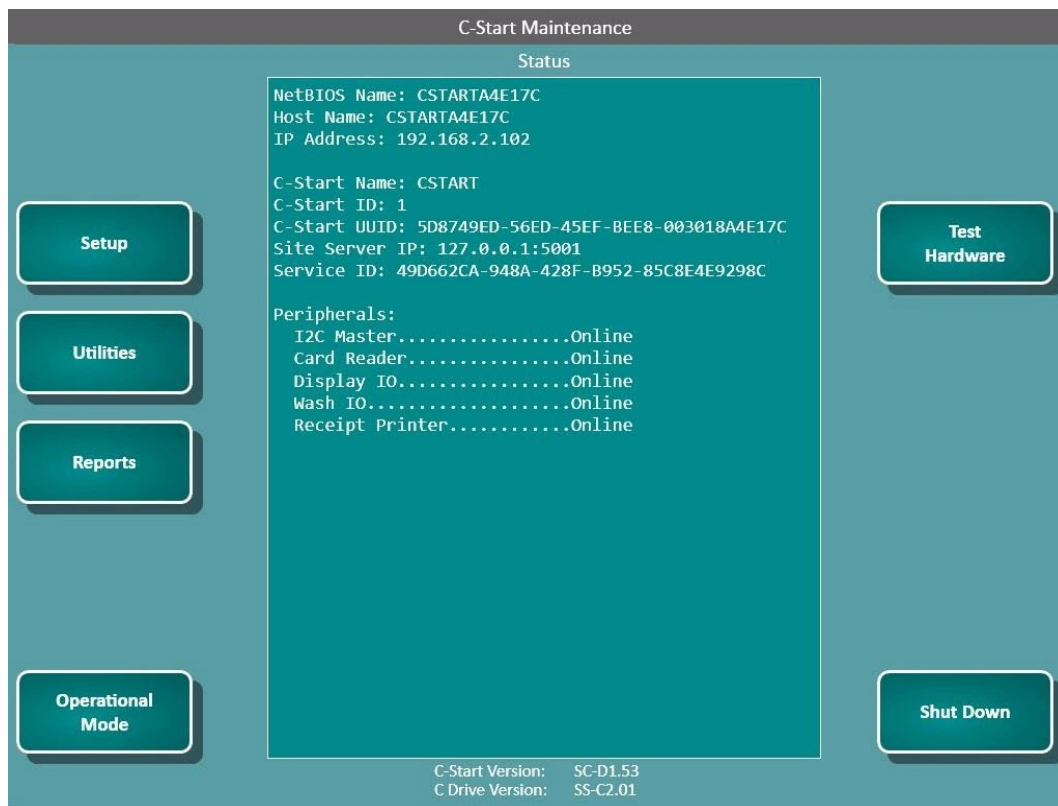
NOTE: This update requires minimum hardware versions: Atom processor, 2GB RAM, and a Solid-State Drive, and a minimum software version of Sierra 1.63. If you do not have these items installed, contact Customer Service at 443-561-1200.

If you have a site with primary and secondary units, you must first perform the following steps on the secondary units. If you have no secondary unit, skip to the [Primary Unit Procedures](#) to update the primary unit.

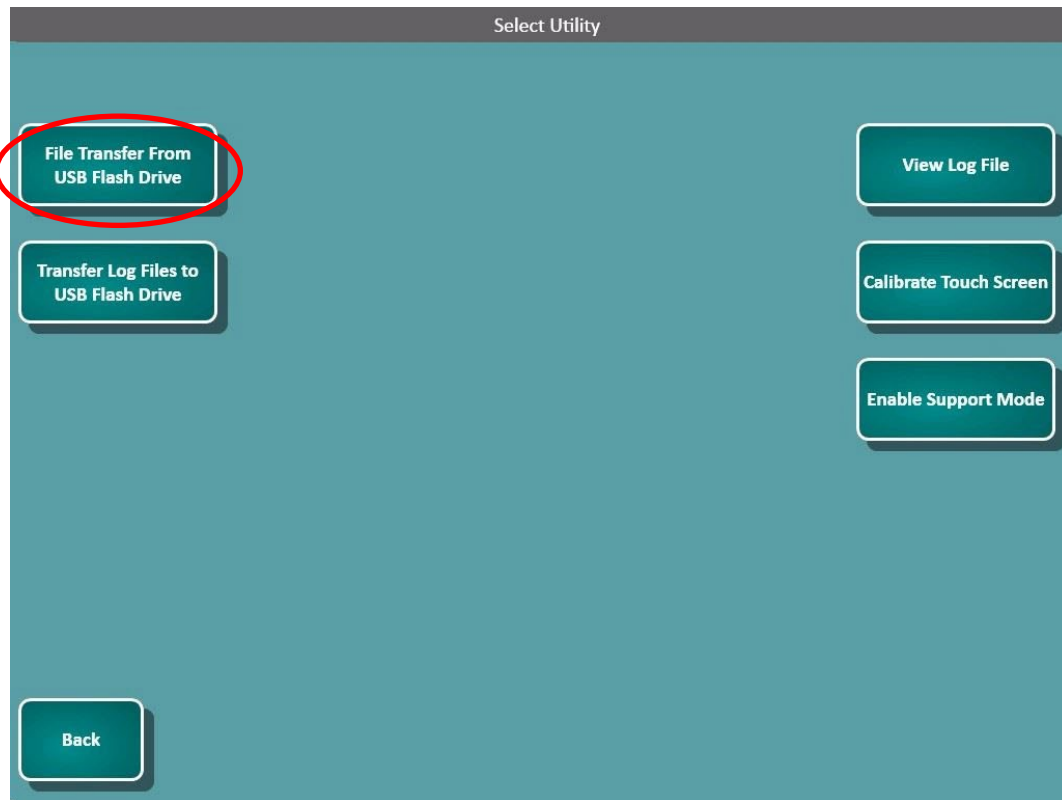
Secondary Unit Procedures

Perform the following software update on all secondary units:

1. Open the Maintenance screen by entering the code 4401 and log into unit.

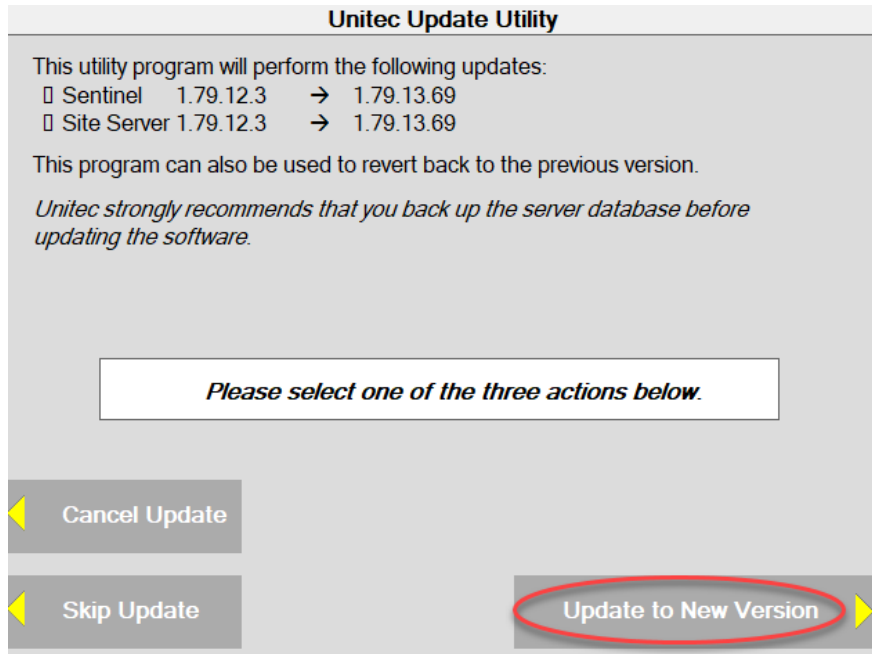


2. Insert the software update thumb drive into the USB slot on the Main Processor Assembly.
3. Select *Utilities* from the Maintenance menu.



File Transfer Screen

4. Press *File Transfer from USB Flash Drive*.
5. Press *Begin* to start the transfer. The file transfer will take approximately 2 minutes. When the screen says the “transfer is complete”, remove the USB thumb drive.
6. Press *Back*. Press *Back* again to return to the Maintenance menu.
7. Press *Shutdown*, then press *Restart*. The unit will restart and launch the Update Utility.
8. Follow the on-screen prompts.



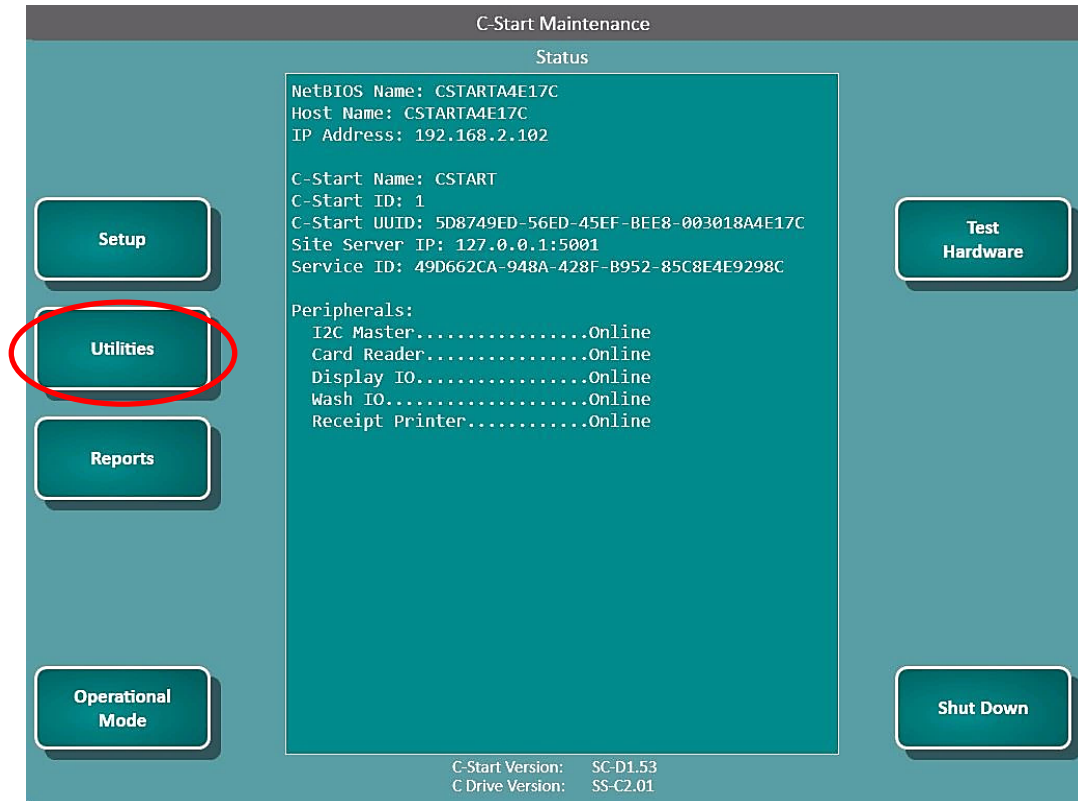
Sample Software Update Utility Screen

9. Press *Update to New Version* to upgrade to the newest version.
 - a. If the kiosk is running Windows 7, a pop-up screen will appear. Select *Yes* on this screen. The new version's installation progress will be noted in the Progress Bar. When the update is complete, press *Exit* to start the unit.
 - b. If the kiosk is running Windows 10, the kiosk will reboot. After rebooting, an updater pop-up screen appears. Select *Yes* on this screen. The new version's installation progress will be noted in the Progress Bar. When the update is complete, press *Exit* to start the unit.
10. Remove the thumb drive. Repeat the update process on all secondary units, using the same thumb drive.

Primary Unit Procedures

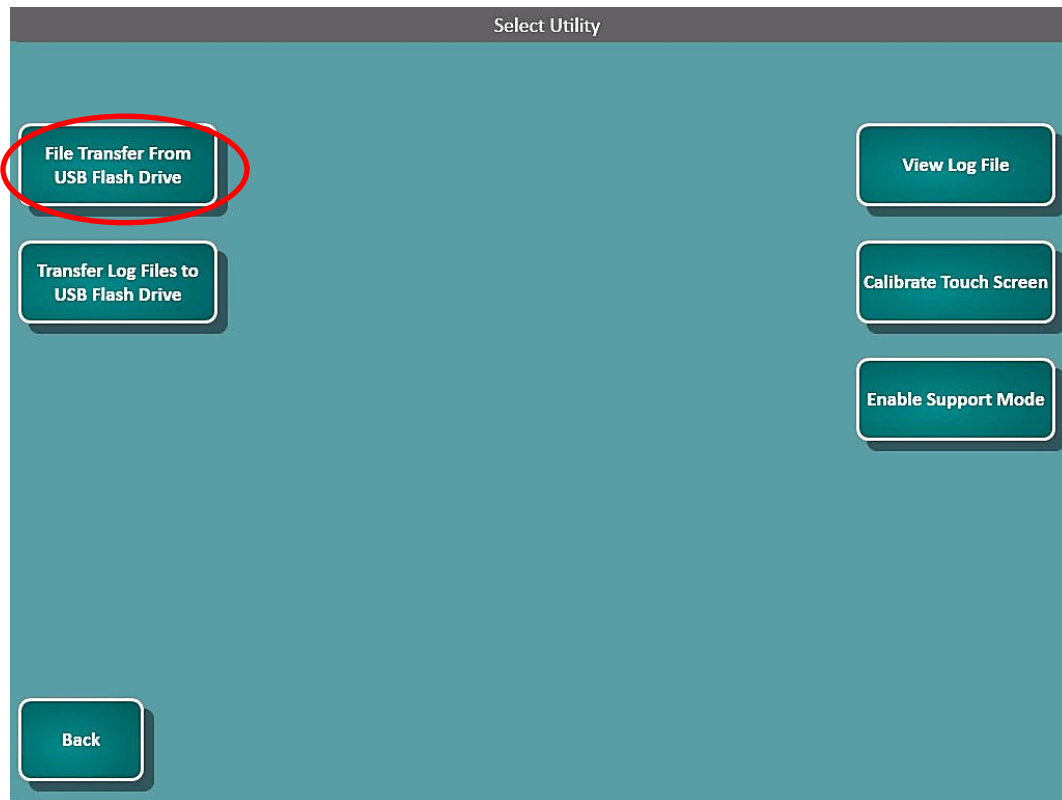
Once the secondary units are updated (or if you have no secondary units), perform the following steps on the Primary unit.

1. Bring up the Maintenance screen by entering the code "4401". Log into the unit.



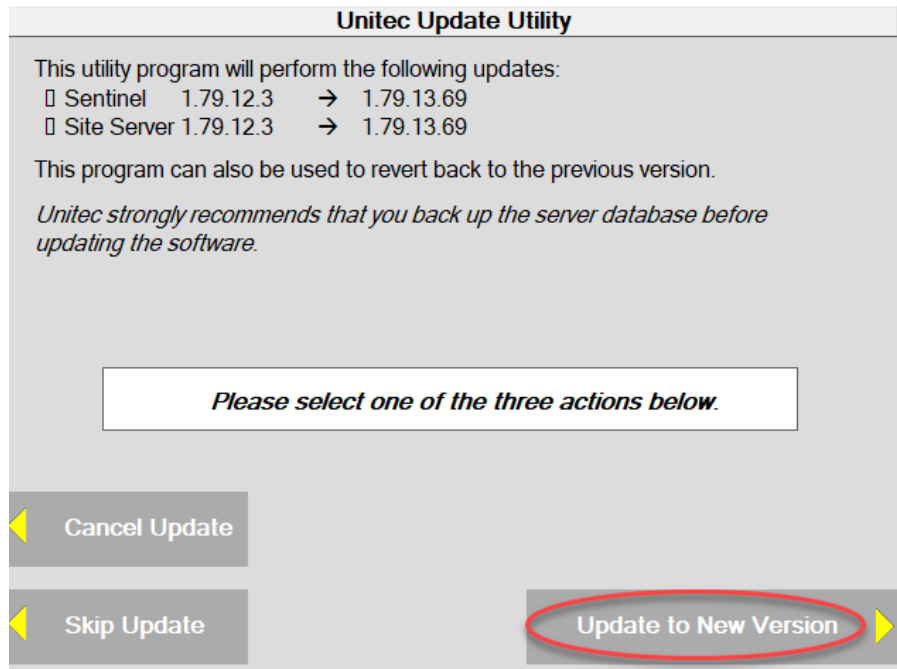
Main Maintenance Screen

2. Insert the same thumb drive into the USB slot on the Main Processor Assembly.
3. Press *Utilities* from the Maintenance menu.



File Transfer Screen

4. Press *File Transfer from USB Flash Drive*.
5. Press *Begin* to start the transfer. The file transfer will take approximately 2 minutes. When the screen says the “transfer is complete”, remove the USB thumb drive.
6. Press *Back*. Press *Back* again to return to the Maintenance menu.
7. Press *Shutdown*, then press *Restart*. The unit will restart and launch the Update Utility.
8. Follow the on-screen prompts.



Software Update Utility Screen

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 - a. If the kiosk is running Windows 7, a pop-up screen appears. Select *Yes* on this screen. The new version's installation progress will be noted in the Progress Bar. When the update is complete, press *Exit* to start the unit.
 - b. If the kiosk is running Windows 10, the kiosk will reboot. After rebooting, an updater pop-up screen appears. Select *Yes* on this screen. The new version's installation progress will be noted in the Progress Bar. When the update is complete, press *Exit* to start the unit.
10. Remove the thumb drive.
11. The kiosk will reboot again then restart in normal operational mode.

It is not unusual for software updates to take up to 10-15 minutes to install. The unit will reboot several times during the update process. You may also see a blank screen with a blinking cursor during the update – this is normal! If the update takes more than 30 minutes to complete, contact Customer Service at 443-561-1200.

NOTE: Depending on which version of Sierra was previously in use before the software upgrade, the user may be prompted to update their password after the upgrade has finished.

Software Version Check

Verify that the current software is 179.13 or higher. If it is not, you will need to update it from the Software Updater Section.

Login to Maintenance mode then access the Web Set up for Sierra Server. To do this, you need a keyboard & Mouse/Trackball connected to the Kiosk or you need to have a local Web connection to the Sierra Server web page.

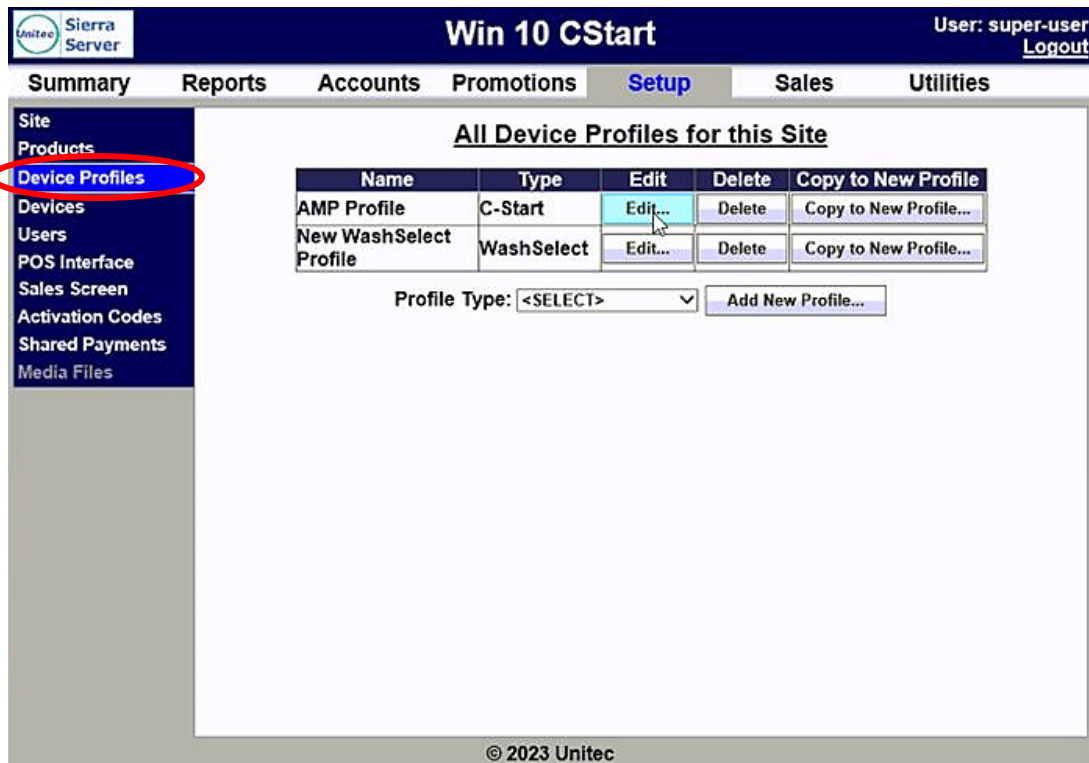
Changing settings to EMV/Tran-EMV

Setting Site to EMV

1. Select Setup-> Site [Edit]
2. Select *Edit Credit/Gift Configuration*
3. Set Type to EMV
4. Hit *Save*

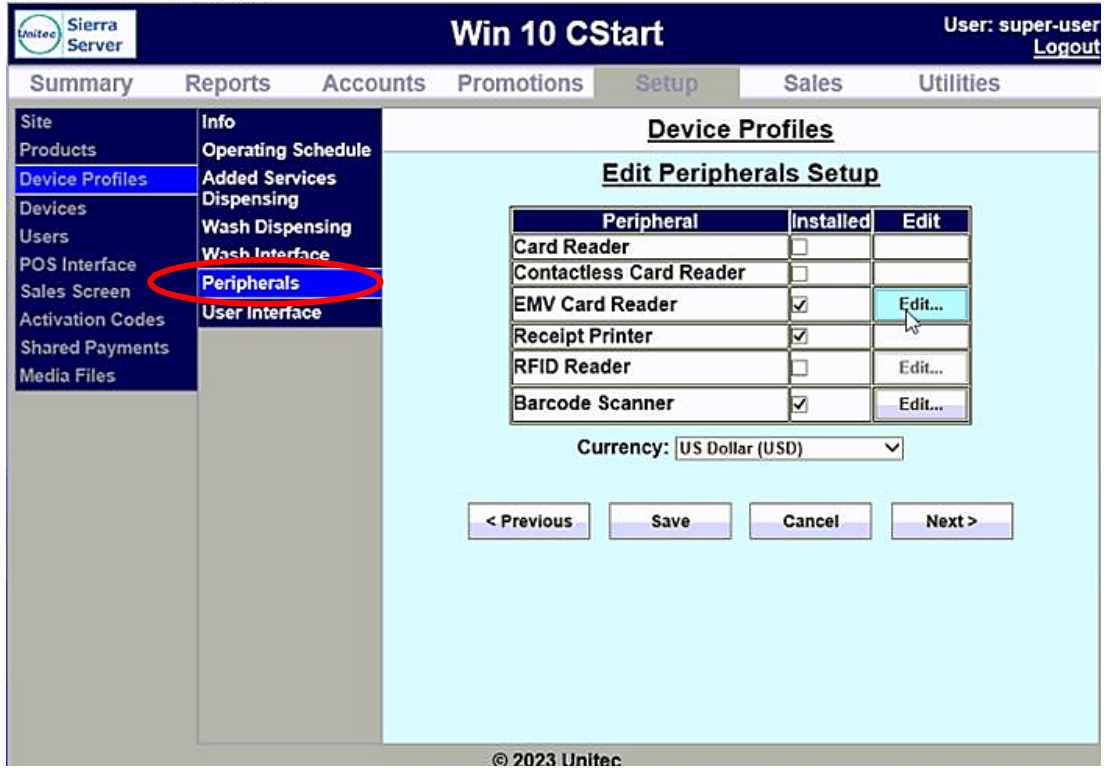
Setting each Kiosk to Tran-EMV

5. Select *Devices Profiles* from the left menu, then click *Edit* on the Kiosk you are changing.



Device Profiles Screen

6. Select *Peripherals*, then check the box in the “Installed” column next to “EMV Card Reader”. Then click *Edit*.



Win 10 CStart

User: super-user Logout

Summary Reports Accounts Promotions Setup Sales Utilities

Site Info
Products Operating Schedule
Device Profiles Added Services
Devices Dispensing
Users Wash Dispensing
POS Interface Wash Interface
Sales Screen **Peripherals**
Activation Codes User Interface
Shared Payments
Media Files

Device Profiles

Edit Peripherals Setup

Peripheral	Installed	Edit
Card Reader	☐	
Contactless Card Reader	☐	
EMV Card Reader	☒	Edit...
Receipt Printer	☒	
RFID Reader	☐	Edit...
Barcode Scanner	☒	Edit...

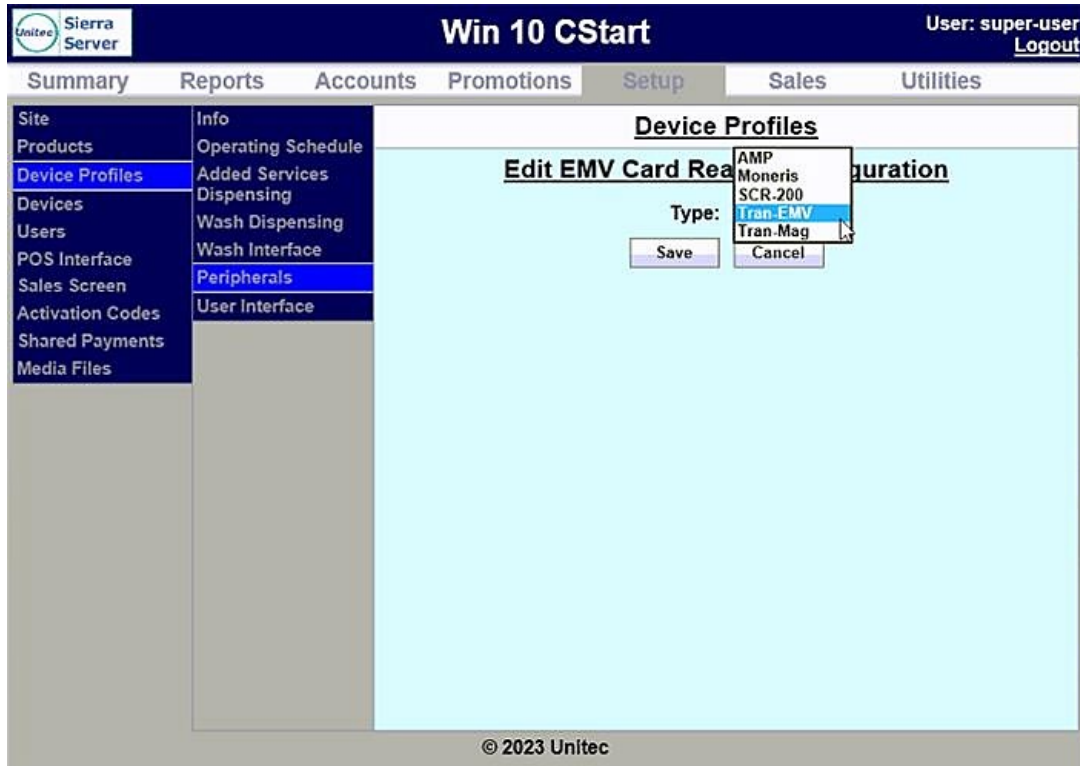
Currency: US Dollar (USD) ▼

< Previous Save Cancel Next >

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Edit Peripherals Setup Screen

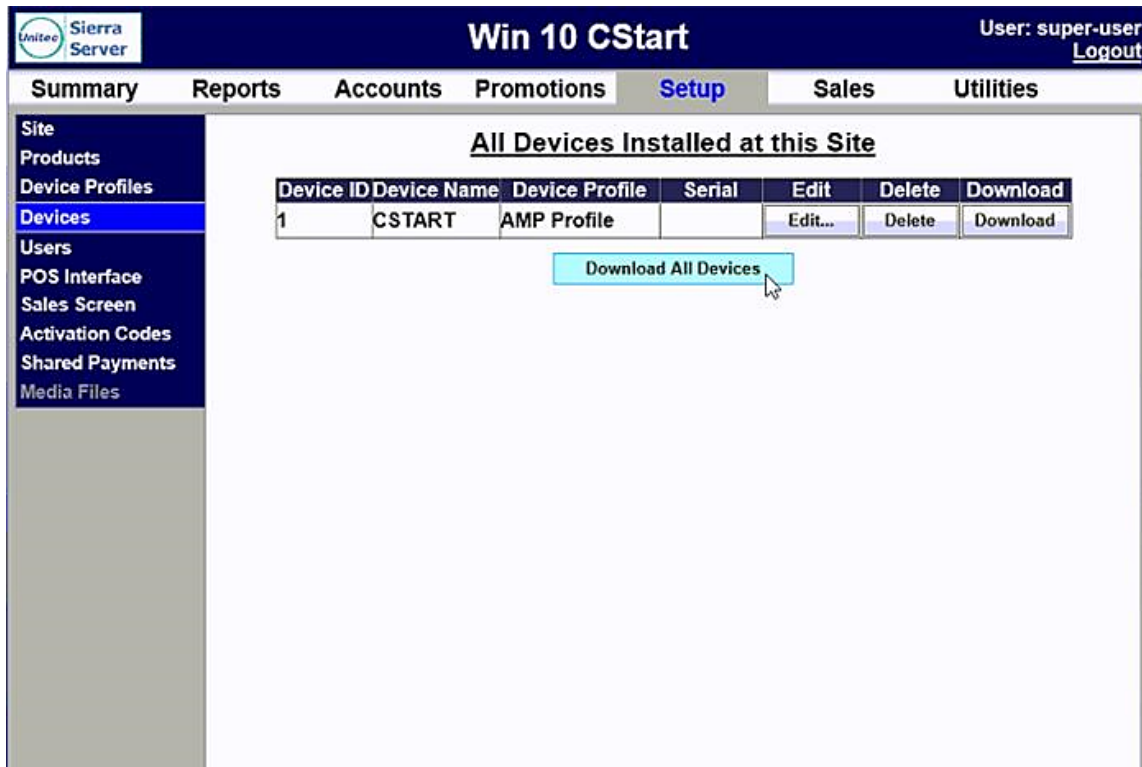
7. Set type to “Tran-EMV” from the drop-down menu, click *Save*.



Edit Card Reader Configuration Screen

8. Click “Save” on Edit Peripherals Setup

9. Select *Devices* from the left menu. Click *Download* next to the device you are changing. If Dual bay and you have installed the PDC into the secondary, click *Download All Devices*.



Download Devices Screen

10. Once the Portal TI+ has restarted and it is back to the Greeting screen, this step is complete.
11. You should now do a shutdown/Restart.

Verifying Modem Connectivity

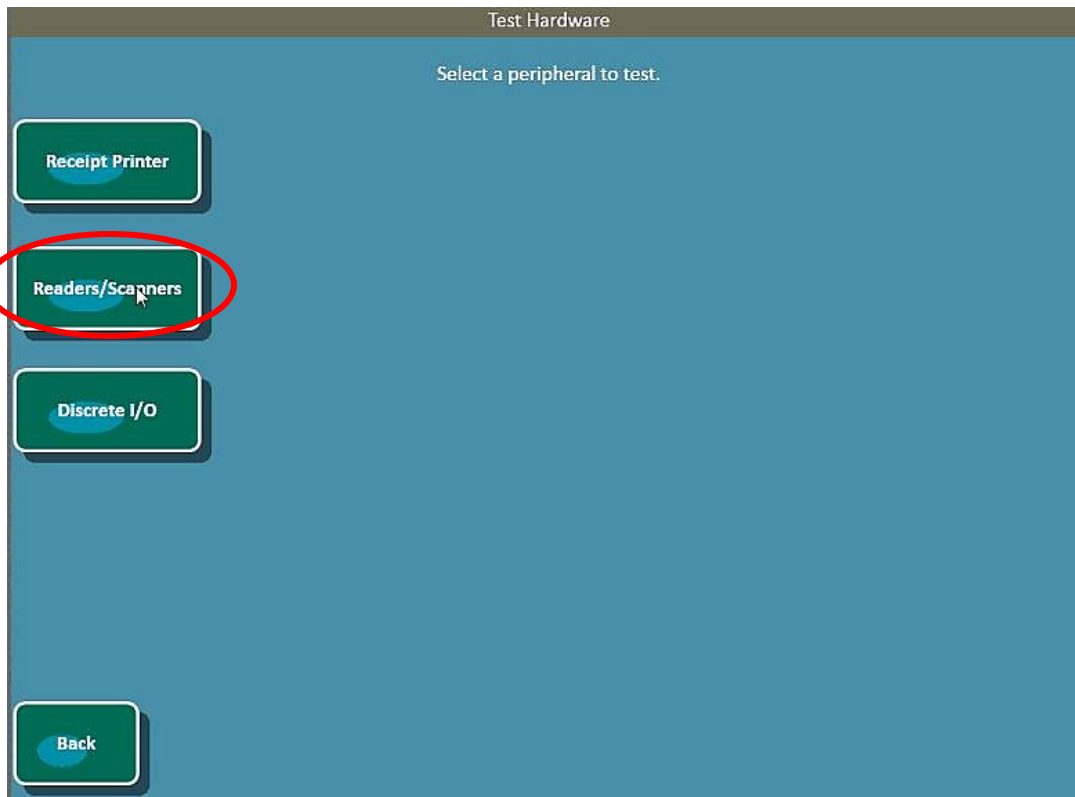
Before verifying the modem connectivity, please ensure the following is complete:

- a. The Merchant account has already been set up with Priority wash.
- b. The Tran Device ID for the unit and site information has been given to DRB In-Bay Merchant Services.

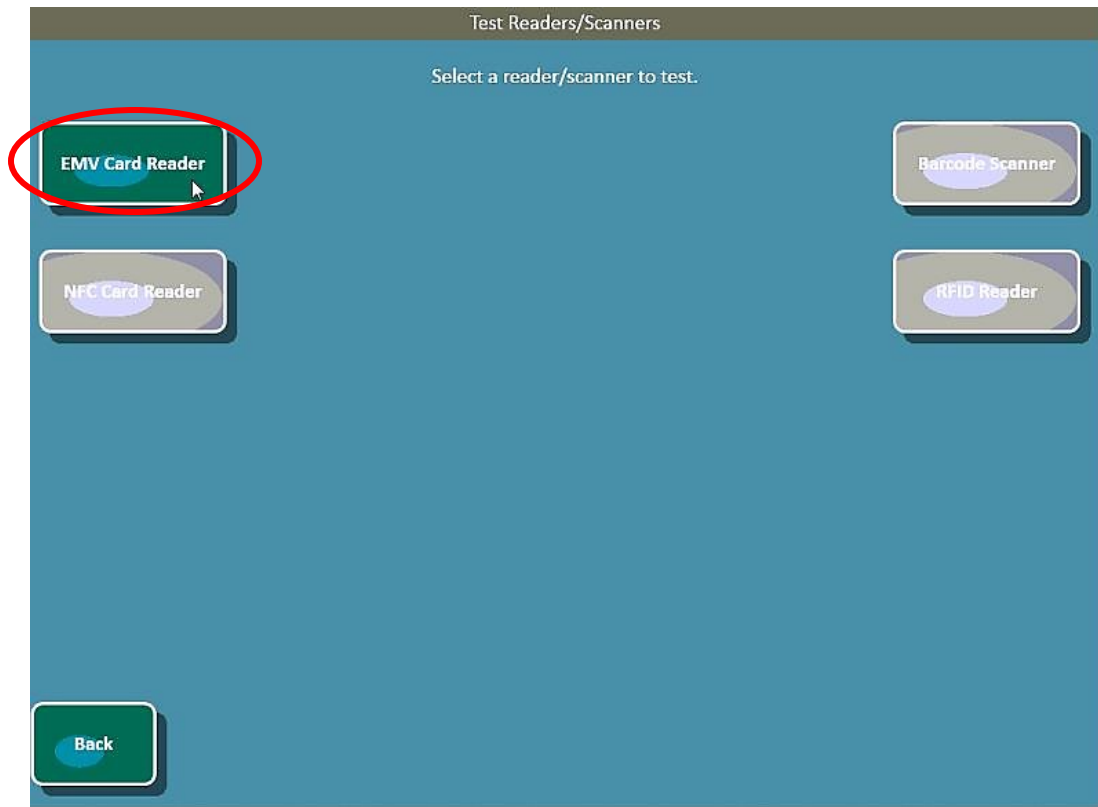
If any of the above has not been done, the following tests will fail. The PDC is updated on a power cycle with Merchant information. Once it has been set up, only one or two power cycles will be needed to update the modem to communicate and work properly.

Procedure:

1. On the Kiosk, Enter Maintenance mode.
2. Select *Test hardware* then select *Readers/Scanners*.



3. Select *EMV Card Reader*.



4. Version should show on the top left as "IPE EMV CLIENT RENTAL VER: 4.xx SL"

Tran EMV Card Reader Test

Peripheral Info

Name: EMV Card Reader
IDTRAN WITH DATATRAN EMULATION
IPE EMV CLIENT RENTAL VER: 4.28 SL
MEMORY CARD INSTALLED:
DEVICE ID: PT7367371098
HARDWARE REV: 3
BD: 2000000000
WINCE VERSION: 7.0
LOAD SIGNATURE: HDGHDHBAJIECIEMV

Peripheral Status

Online: Yes
IP ADDRESS: 192.168.2.101
SUBNET MASK: 255.255.255.0
DEFAULT GATEWAY: 192.168.2.1
DNS1: 10.98.2.14
DNS2: 8.8.4.4
MAC ADDRESS: 00CF78018E21
3/8/2023 07:11:37

Message: Status received

Swipe Test

Card Prefix: Last 4 digit:

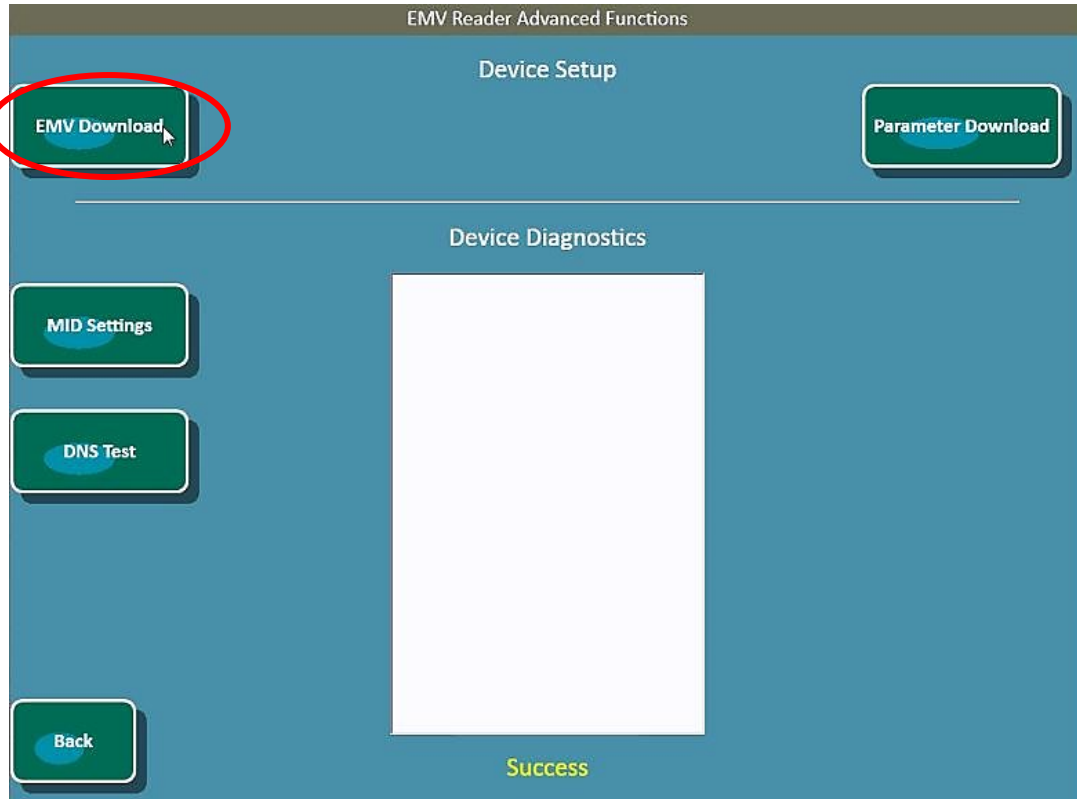
Back

Advanced

If the Card Reader button is grayed out, or the "EMV reader= Ok" does not appear on the Maintenance screen when entering Maintenance mode, do a restart and try again. If this still does not work, contact DRB-In Bay Merchant Services to verify the PDC Device ID is set up. Have the Device ID and site information ready for the representative.

Perform an EMV Download in Maintenance Mode

1. In the Advanced screen, click on *EMV Download*.



Should show VP6800 screen will show its updating and then less than a minute after the 6800 screen shows its done, should show “Success” in yellow text on the bottom of the Portal TI+ screen.

2. View MID settings. If the MID settings are 0’s/ not populated, or the Gateway test failed, then have Tech on site power cycle the modem then do a parameter download again.

Testing the System

Technician should Perform a Credit transaction with a known good Master Card or Visa chip card (Do not test with an Amex or Discover chip card).

If there is a credit decline, Contact the DRB SCE for further assistance. Log files should be viewed to indicate troubleshooting steps.

Troubleshooting

When the PDC powers on, the blue light on the side will flash until it gets a connection to the local area network (the DRB Linksys Router). The blue light will remain solid when it has a stable connection. If this does not happen, the PDC will not update or function properly. If no light illuminates at all or the PDC does not respond to serial commands in Tran-EMV or Tran-Mag, replace the PDC with a new one. The distributor must give the Device ID to DRB in Bay Merchant Services. Once merchant services receive the Device ID, it may take up to one business day to complete troubleshooting.