


# Installing an MX925 RecTrac/CYMS 10.3



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## Installing an MX925 with RecTrac/CYMS 10.3

### Considerations

- Signatures are no longer required for any sales under \$25.00 for **non-EMV** (swiped/manual key) transactions ONLY. Any sale amount above \$25.00 will require a signature and the MX925 will prompt the customer to sign.
- If it is an EMV transaction (card is being inserted to read the chip), then it will ALWAYS prompt for a signature/pin on the reader.
- The serial number of the MX925 is tied directly to the merchant account that is setup in the VeriFone Point portal. This will be done prior to setting up and installing the MX925 the first time and communicated to you by VSI ASP. If you decide to change where a MX925 is going to be deployed, you will need to contact VSI ASP and provide the S/N of the unit that you want to change.
- In order to move an MX925 from one location to another, that device needs to be unlinked from its current merchant account and then linked to the new one. This linkage will be done by the VSI ASP team.
- DO NOT CLONE AN EXISTING POINT CREDITCARD DEVICE. Because you are pairing the actual device record to the MX925 unit, cloning the device in RecTrac/CYMS will also copy this MAC address registration and you cannot un-register it without breaking the working device.
- For locations that do "card on file" transactions (auto debit billing, linking cards to an open ticket tab), ALL card info on file will need to be re-linked after the switch over. **A Pin Pad dedicated to Auto Debit will be required.** Chase Paymentech/POINT will require a pin pad per merchant id and terminal id. You cannot share a retail pin pad with a recurring/auto debit process.
- All existing MX830s need to be destroyed once the garrison is done using them. Recommend keeping a handful of units for a few months. The old CPS will be in place until the army has completely moved off from the legacy Payware Transact System.
- IMCOM G6 will remotely install new virtual servers for MS server 2012. VSI will then follow up with a RecTrac/CYMS server migration to the new VMs and Progress 11. This new configuration will allow both new mx925 POINT usage as well as legacy Payware Transact mx830 processing.
- Two client files are needed in order to register a pin pad for use. The files are **assemblies.xml** and **BouncyCastle.Crypto.dll**. VSI will provide the files. The garrison should store on a share drive to make deployment easier. Files can be found at <ftp.vermontsystems.com>. \File Updates And Drivers\VeriFone\Point. Obtain these files before attempting the first pin pad setup.

**Note:** Disable HBSS on the POS terminal before attempting to register the pin pad with the PC. HBSS can be re-enabled after the registration process is complete.

## Equipment You Will Receive from VeriFone



## Cables You Will Receive

Use the "Ethernet Purple Cable Switch" at locations that do not have a spare network drop at the POS terminal. You will also need a patch cable.



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## Hardware Setup

- 1 After un-boxing everything, find the "Tailgate Interface Board Adapter." Remove the metal guard from the back by sliding it out. Attach to the "Ethernet Purple Cable Switch" to the "Tailgate Interface Board Adapter."

**Note:** Only one end of each cable will attach to the "Tailgate Interface Board Adapter," and it can only plug in one way.

- 2 Once the cable is connected to the "Tailgate Interface Board Adapter," slide the metal guard back into place. Now slide the "Tailgate Interface Board Adapter" into the back of the MX925, under the metal bracket, until it snaps into place.

**Note:** The "Tailgate Interface Board Adapter" can only be inserted one way.

- 3 Connect the Ethernet cable to the unit.
  - For the "Ethernet Purple Cable Switch:" Unplug the Ethernet cable from the POS terminal. Plug that cable into the "ETHER 1" port on connector brick. Then plug one end of the patch cable into the "ETHER 2" port on the connector brick and run the other end into the Ethernet port on the POS terminal.
- 4 Remove the existing MX830 from the existing stand. Attach the MX925 to the new stand. Line up the three bracket slots and slide it on, securing it with the existing wing screw.
- 5 Plug in the "Power Adapter" and attach it to the cable.
  - For the "Ethernet Purple Cable Switch:" Plug the power connection into the connector brick where it says +12VDC. The MX925 will power on.

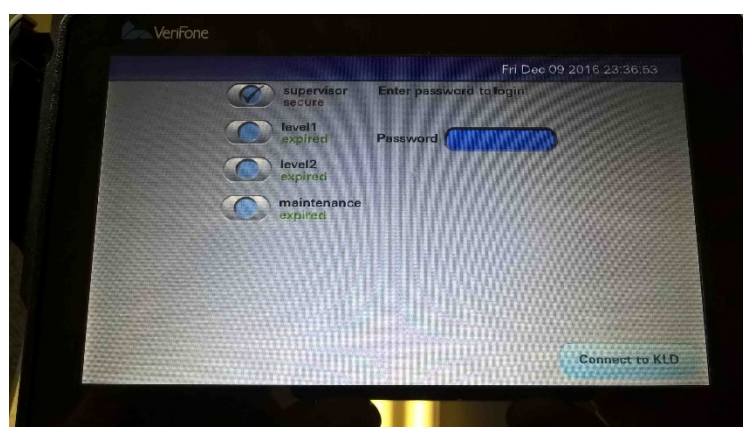
## Connecting to Army Networks

**Note:** You can skip to [Device Preamble Process](#) by not plugging in the Ethernet cable and assigning Ethernet information to the device “offline.” The steps below can be used if an Ethernet already plugged in.

- 1 When first setting up the MX925 on the network you will see this screen. The MX925 gets this error because it is set up to use DHCP to get network information. Army networks are not set up to provide DHCP so we have to manually enter the network information.

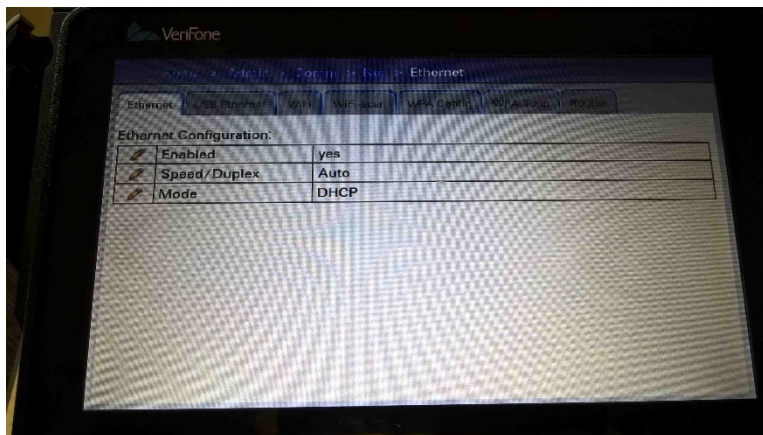


- 2 Enter 159 simultaneously on the keyboard to get to the system administration screen.
- 3 Enter password of 166832

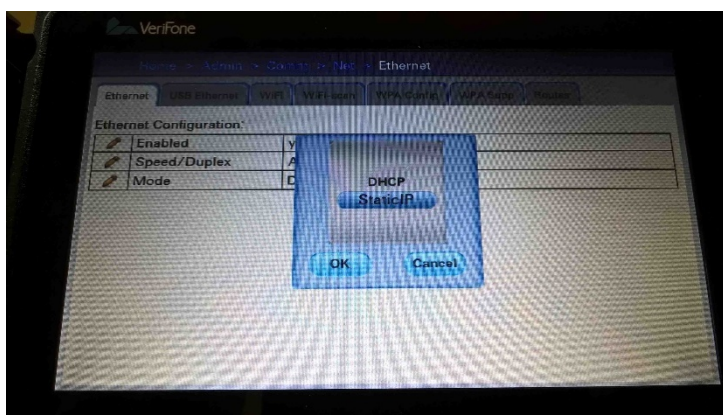




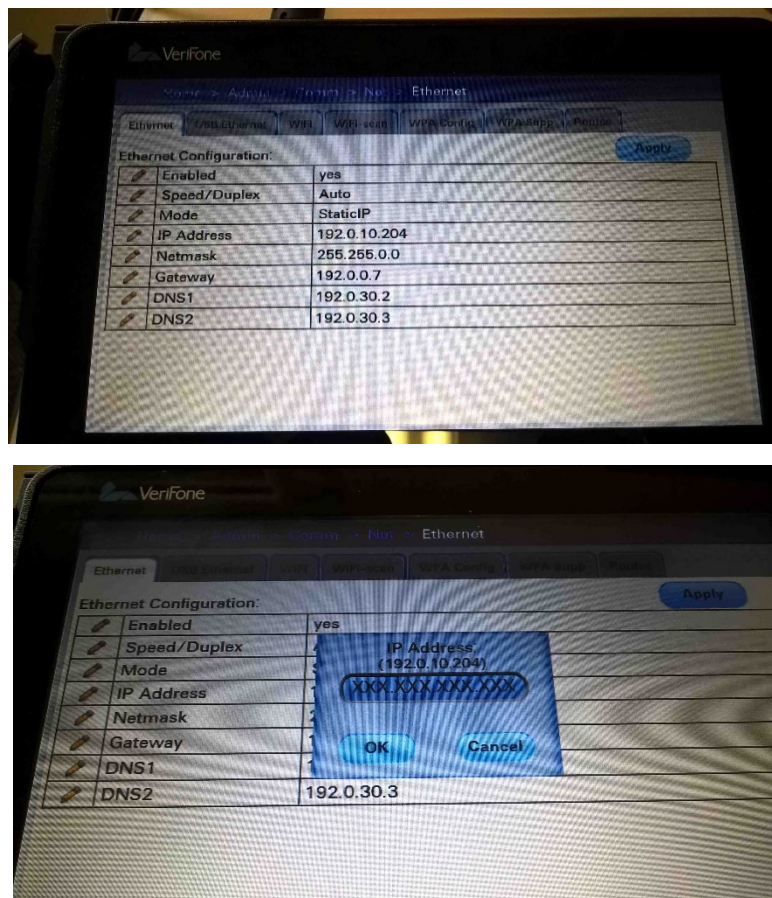
- 4 Click the Administration tab • Communication tab • Network tab • Ethernet tab. You will see the Mode = DHCP.



- 5 Click on the **Mode** line. Change the setting from "DHCP" to "StaticIP" and select **OK**.



- 6 The screen will change so you can enter the network configuration settings. Your settings will probably be blank. To change the settings click on the line you want to edit. Enter settings specific to your network.



- 7 Click the **Apply** button when all of the settings are entered. You will see a pop-up that says, "Reconfiguring Ethernet."
- 8 Click the **Home** link at the top of the screen and then click the **Run App** button.
- 9 The application will start the Preamble Process where you will have to enter the network information again.

## Device Preamble Process

The device must now register and VeriShield keys must be synched. This commonly is referred to as the preamble process.

- 1 The MX925 will boot up to the "Configure Network Settings" screen as seen here:



Select "Static" network configuration

This will prompt for the following static IP settings:

**Notes:** All numbers need to be zero filled. For Example: an entry of 10.2.100.30 would be entered as 010.002.100.030.

You can run `ipconfig /all` from a command prompt on the POS terminal to find the gateway and primary DNS IP's needed for this unit.

After entering in each IP, hit the enter key on the unit's keypad, which has the green circle on it (bottom right on the keypad).

- IP address = IP you want the unit to have, determined by the GISO/NEC. Default Gateway and Subnet Mask must be entered as well.
- Primary DNS = DNS IP address of your garrison.

**Note:** Make sure you press enter on the keypad and NOT the "Skip DNS" button on the screen to complete DNS Entry.

- Secondary DNS = DNS IP address of your garrison.

**Note:** Make sure you press enter on the keypad and NOT the "Skip DNS" button on the screen to complete DNS Entry.

- 2 Once the network settings have been set, a screen will display that echoes the network IP and setting type. If you receive a network error, then the unit is unable to get to the internet, meaning the port is most likely blocked. Contact your local NEC.
- 3 Then a screen will display showing "Processing...." At this time, the device is performing a registration command to get the Device Key. It is also running the VSP activation command, which is enabling encryption. If this process is successful, then a screen showing "VSP Reg Success" will show. If any "failure" messages appear at this time, then see the [Troubleshooting Section](#) at the end of this document.
- 4 If Step 3 was successful, then the following screen will appear. Select **Yes** or **Continue**.



- 5 The device will then prompt for a card swipe. **Swipe** a credit card; any card will do. The device is just confirming the account information is correct and it will run a sale for \$1.00 and immediately void it. If this step fails, a message will display asking if you would like to try again.
- 6 Once Step 5 succeeds, the device will display an informational screen and then eventually display the idle screen, which contains the default IMCOM logo.

**If you receive a “Failed to get Device Key” error, then please call VSI ASP at 800-377-7427 x3909. They will ensure the serial number of the MX925 is linked to an account. You will also get this error if the pin pad can’t get to the internet.**

**Note:** The MX925s come with tip processing disabled by default. If this unit is being deployed at a location that will be taking counter tips, contact VSI ASP with the applicable S/N and a package enabling counter tips will be installed remotely.

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## RecTrac/CYMS Setup

- 1 RecTrac/CYMS Server configuration – required for auto-debit to work.
  - Browse to <path to>\vsi\dlc113
  - Edit the startup.pf with Notepad.exe
  - Replace -cpinternal ISO8859-1 with -cpinternal 1252
  - Replace -cpstream ISO8859-1 with -cpstream 1252
  - Save the file.
  - Reboot the server.
- 2 Verify if the following folder exists on the POS terminal. If the folder does not exist, then create it:

<x:>\<path to>\webclient\assemblies\

*Examples:*

*C:\vsi\webclient\assemblies\ or*

*C:\Program Files (x86)\Progress Software\webclient\assemblies\*

Put the files assemblies.xml and BouncyCastle.Crypto.dll into this folder. VSI will provide the files. The garrison should store on a share drive to make deployment easier. Files can be found at [ftp.vermontsystems.com](http://ftp.vermontsystems.com)\File Updates And Drivers\VeriFone\Point.

**Note:** Disable HBSS on the POS terminal before attempting to register the pin pad with the PC. HBSS can be re-enabled after the registration process is complete.

- 3 Browse out to <path to>\webclientapps\vsi\<application name>\ini\. Edit the rectrac.pf file with Notepad.

*Example path to the ini folder: c:\vsi\webclientapps\vsi\RecTracLAN\ini\*

Verify that the parameter -cpinternal 1252 exists, if not add it to the end of the file.

Add the parameter -assemblies <path to> the assemblies directory you created

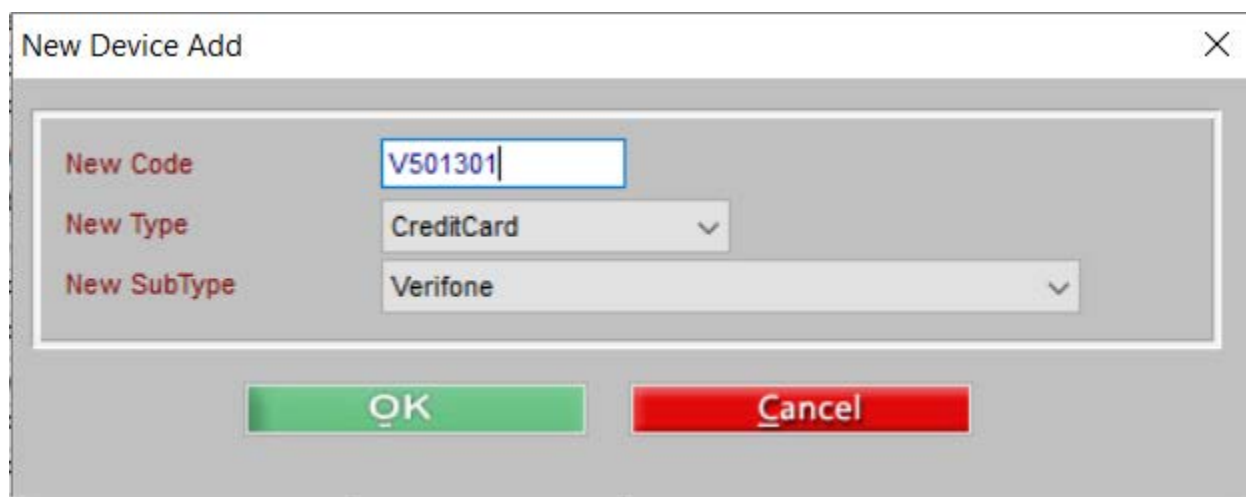
*Example Assemblies: c:\vsi103\webclient\assemblies*

*Example Assemblies: C:\Program Files (x86)\Progress Software\webclient\assemblies*

If you have multiple application name folders, edit all of the rectrac.pf files.

- 4 Log into RecTrac/CYMS on the POS terminal. Go into Printer Device Maintenance. Create credit devices. Finance prefers the 6 digit Chase TD number be part of the code so the accounts are easy to match up with the Chase merchant reports. Sample V501301 (or use site prefix 32501301)

In Printer Device Maintenance click the Add button. Select CreditCard as the New Type. Call the new device something Finance will recognize (ex V501301), with a Subtype of VeriFone. When you click OK on the new device screen you will see the configuration screen for the new credit card device. Set the Payment Engine as PAYwareConnect-Point and the Account Type as Normal Retail.



New Device Add

New Code: V501301

New Type: CreditCard

New SubType: Verifone

OK Cancel

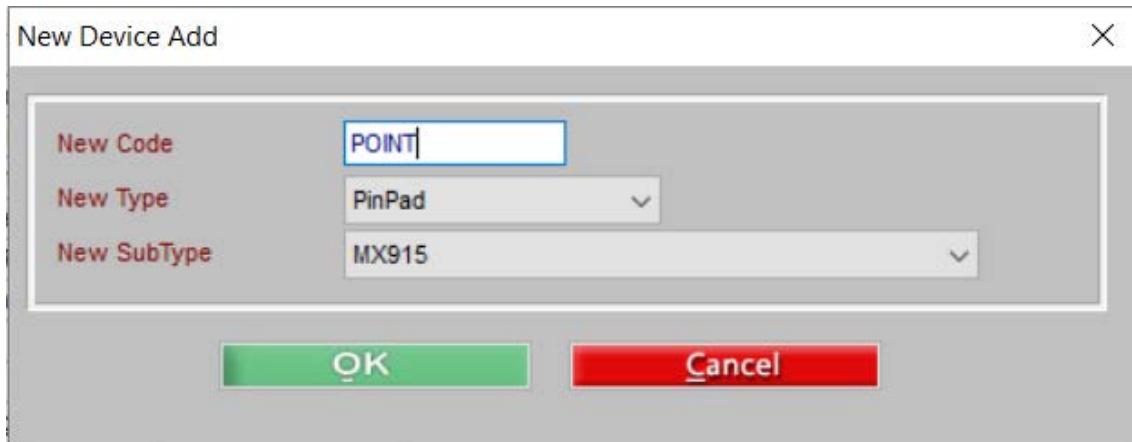


### New MX915/MX925 CC Device

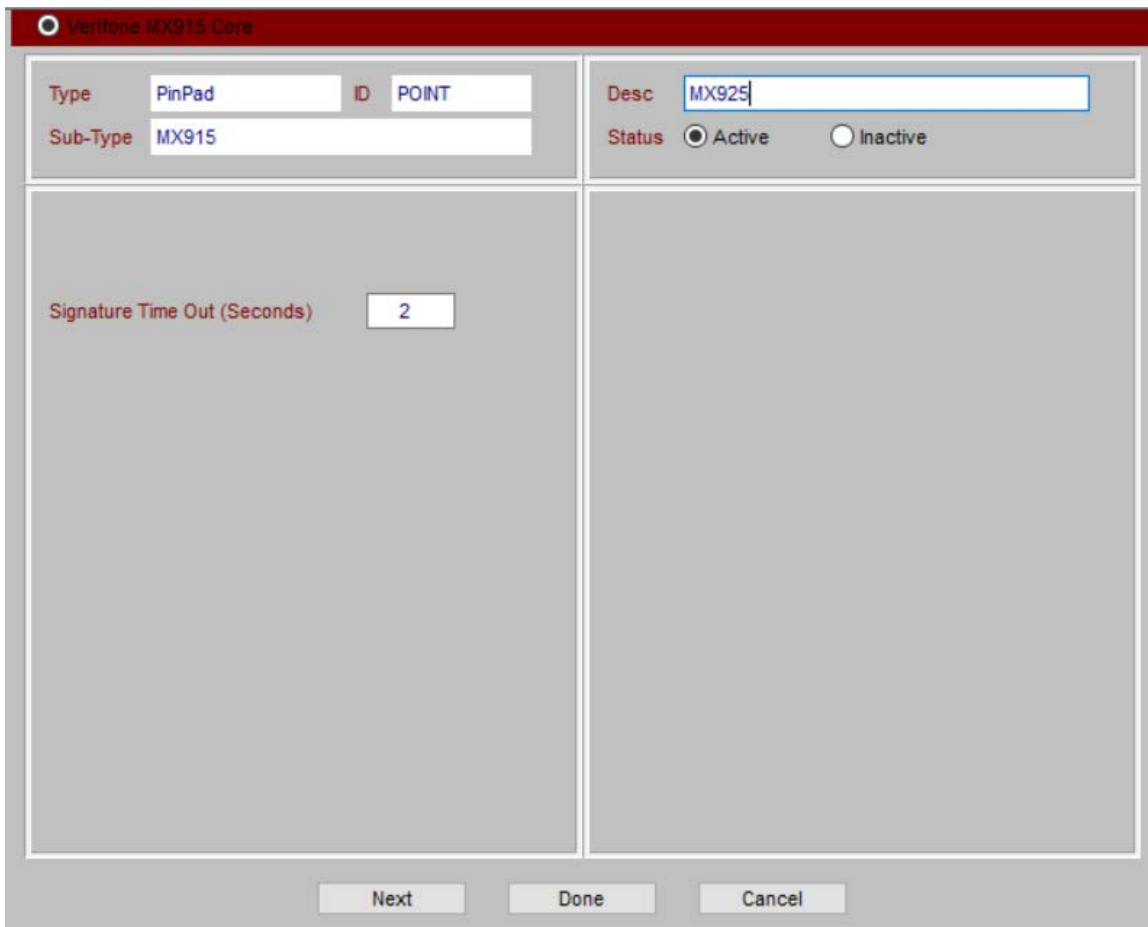
**Note:** If this location is going to have multiple MX925s tied to the same merchant account, EACH MX925 will need a unique credit card device in RecTrac/CYMS. Suggest numbering them A, B, C etc. as needed and creating them all at once. Example: V501301A, V501301B, V501301C, etc.... Save the Credit Device. You will finish the setup in a future step.

- 5 Create a new Pin Pad device. In Printer Device Maintenance click the Add button. Select PINPAD as the New Type. Call the new device "POINT," with a Subtype of MX915. When you click OK on the new device screen you will see the configuration screen for the new pin pad device. Use "MX925" as the description and set the Signature timeout to 2 seconds to start.

**Note:** This device can be shared by any site since the only variable is the signature timeout.



A dialog box titled "New Device Add" with a close button (X) in the top right corner. It contains three input fields: "New Code" with the text "POINT", "New Type" with a dropdown menu showing "PinPad", and "New SubType" with a dropdown menu showing "MX915". At the bottom are two buttons: a green "OK" button and a red "Cancel" button.



A configuration window titled "Verifone MX915 Core" with a red header bar. It is divided into two main sections. The left section contains fields for "Type" (PinPad), "ID" (POINT), "Sub-Type" (MX915), and "Signature Time Out (Seconds)" (2). The right section contains fields for "Desc" (MX925) and "Status" (Active, Inactive). At the bottom are three buttons: "Next", "Done", and "Cancel".

- Now go into Device Assignments and find the applicable workstation name. Highlight the current CREDITCARD device linked and click **Modify Device**. Note the auth receipt printer settings, as this will be needed in the new CREDITCARD device in the next step. If applicable, note the tip Transcode being used (only needed if this location takes tips). Click **Done**.

**MX830 Credit Card Device**

**Note:** If you see an AUTH-RCPT device linked to this workstation, auth receipts are controlled by this device and the settings in the CREDITCARD device can be ignored.

- Highlight the current CREDITCARD device and click **Remove Selected**. Highlight the PINPAD device and click **Remove Selected**.

**Note:** The PINPAD device might be linked at the Menu Group level or even at the Default level. You may need to remove it from higher levels in the device hierarchy as you link the new one to the workstation. Leave the current PINPAD device linked at the default level until ALL locations have been switched over to the new MX925 readers.

- 8 In the Device Type dropdown, select CREDITCARD and in Device to Add select the device code that was created in step 4 above. Highlight the newly linked CREDITCARD device and click **Modify Device.**"
- 9 On the "VeriFone Core" screen, update the device description. Then update the "Auth Copies," "Auth Printer" fields that you copied from the prior CREDITCARD device in step 6. If there is an AUTH RCPT printer linked to this workstation, then you can ignore the Auth Printer fields.

**Notes:** If this location takes tips, change the "Account Type" to "Restaurant" in the drop down, enter in the applicable tip Transcode for this location, and then change it BACK to "Normal Retail." **This is important for tip locations.**

If this location takes tips, then send a list of the MX925 serial numbers for this location to [asp@vermontsystems.com](mailto:asp@vermontsystems.com). The default configuration for the MX925 pin pads will not ask the customer if they want to apply a tip. Once the pin pad is on the network, VSI will need to push down a new configuration file that turns off debit cards and turns on the option to ask the customer for a tip.

If this location takes tips, then verify how clerks receive their tip money. If they are taking money out of the drawer at the end of their shift, then enable the *Perform Tender Exchange* field on the "Other Settings" Screen, lower left.

If this is an auto-debit pin pad, then enable the *Check Household for Stored Cards* option on the "Other Settings" Screen, lower left.

☐ Use SSL Connection With PAYWare Products  
☐ Perform Tender Exchange For Tip Processing  
☐ Check Household for Stored Cards  
☐ Allow Manual Card Entry for MSR HID device  
☐ Allow For Partial Auth Processing  
☐ Process \$1 Pre-Auth for IB Setup

On the Point Settings Screen, enter in the IP address of the MX925 you are connecting to. Enter port numbers 5015 (primary) and 5016 (secondary). Enter in the "Serial Number" of the unit as well, in the format shown in the screenshot:

Device Information for BASE VERIFONE POINT DEV (00BASEPT)

☒ Verifone Core   
 ☐ Other Settings   
 ☐ E-Commerce   
 ☒ Point Settings

Type: CreditCard    ID: 00BASEPT  
 Sub-Type: Verifone

Desc: BASE VERIFONE POINT DEV  
 Status: ☒ Active    ☐ Inactive

Connection Type: Ethernet

MX IP Address:     Ping

Primary Port: 5015    Test

Secondary Port: 5016

Serial Number: 123-456-789

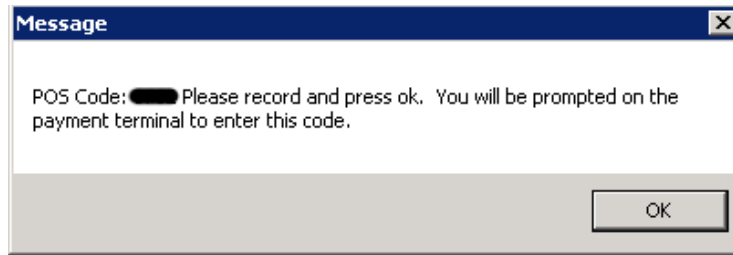
MAC Label:

Register with MX915  
 Test MAC  
 Un-Register from MX915  
 Un-Register All from MX915  
 Set Date/Time  
 Get Counter Value  
 Re-boot MX915  
 Check MX915 Status  
 Cancel Transaction  
 Last Transaction  
 Retrieve Version

Next    Done    Cancel

Click **Done** to save the device settings. Then highlight the new CREDITCARD device that is linked and click **Modify Device**. Navigate back to the "Point Settings" screen.

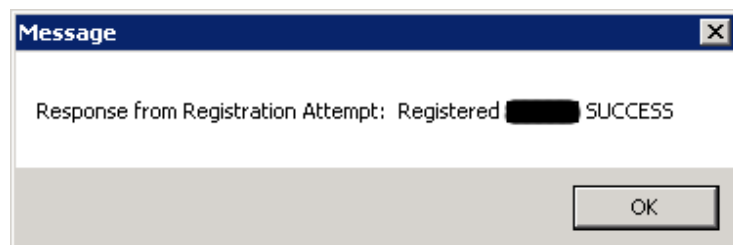
**10** Now click **Register with MX925**. The following window will pop up:



Record the POS Code number.

**Note:** The POS code will be unique every single time you do this registration process.

When ready, click **OK** and the MX925 will prompt you to enter in this code. Enter in the same number and press the green circle return key on the unit. If it registers successfully, then the following message will appear:



Click **OK**. The *MAC Label* field will now be filled out.

**Note:** The MAC will be unique for every unit.

Click **Done** to finish device setup. **Exit RecTrac** and log back in start using the new MX925 card reader.

- 11** If this location does installment billing auto debit, then make sure you edit applicable CC-REDIRECT devices to point to the proper recurring device. If they have multiple readers, then you need to create brand new CC-REDIRECT devices, one for one, with the new point devices and link them accordingly.

**FOR CYMS (and sometimes RecTrac):** If this location has a specific billing user they run billing as, then be sure to change the CREDITCARD device linked to this user and link the appropriate CC-REDIRECT device.

**Note:** If using the temporary Progress 11, 32 bit “Billing Server” for the Legacy Payware Transact system (mx830 pin pads), then remove the Billing App Server device from your billing user. This will only apply to a few installations.

- 12** In order to process credit card refunds on transactions that happened prior to the installation of the MX925 pin pads, you will need to create a new pay code. This is because the MX925 does not know about the previous transaction. Go to Files • System • Finance Code Maintenance • Payment Code Maintenance. Click the **Add** button at the bottom of the screen. The new code will be 87. If this code already exists in your database, then choose a number as close to 87 as possible.

Change the Pay Type to "Credit Card," insert a meaningful description, and enter the word "Swipe" in the Prefix Validation field.

The screenshot shows the 'New Payment Code' window. The 'Pay Code' field is set to 87, 'Pay Type' is 'Cred Card', and 'Status' is 'Active'. The 'Description' is 'Credit Card Swipe' and 'Screen Desc' is 'CC Swipe'. The 'F'Currency Rate is 1.00000. The 'Prefix Validation' field contains 'swipe'. The 'Drawer To Open' is set to 'Login Drawer'. The 'Pay Ref 1 Label' and 'Pay Ref 2 Label' fields are empty. The 'Endorsement Text' field has three empty lines. The 'Currency List', 'Coin List', and 'Totals List' fields are empty. The 'Done', 'More Settings', and 'Cancel' buttons are at the bottom.

- 13** Enter the new Pay Code in as an *Allowed Refund Code* in Payment devices that will be doing refunds on the MX925.

<b>User Refund Options</b>	<input checked="" type="checkbox"/> Refund Apply	<input checked="" type="checkbox"/> Refund Now	<input checked="" type="checkbox"/> Refund Void	<input checked="" type="checkbox"/> Refund Finance	<input checked="" type="checkbox"/> Refund Rectrac
<b>User Refund Options (POS Only)</b>	<input type="checkbox"/> Refund Apply	<input checked="" type="checkbox"/> Refund Now	<input type="checkbox"/> Refund Void	<input checked="" type="checkbox"/> Refund Finance	<input type="checkbox"/> Refund Rectrac
<b>Allowed Pay Codes</b>	1,2,3,4,5,6,7,8,9,10,11,12,13,14,98				
<b>Allowed Refund Codes</b>	2,3,4,5,6,7,8,9,14,87,97,98,99				
<b>No Open Cash Drwr Pay Codes</b>					

- 14** For credit card reporting, you will most likely have to link Credit Card devices together (upper right on the "Other Settings" screen in the new CC device(s) created), and users will have to make sure they select ALL Credit Card devices for a Location when running the RecTrac/CYMS Credit Card Report to balance.

**Users Linked to This Device Will Also Be Able To Manage The Following Merchants**

Available		Allowed
1LYNK	<input type="button" value="Add &gt;"/> <input type="button" value=" &lt; Del"/> <input type="button" value="Desc"/>	V501302A
CCMAN		V501302B
CSOLUT1		V501302C
CYBERSRC		
DEMO		
ETSERIE		
ETSERIP		

- 15** For Auto Debit/MOTO devices, the "Cards Accepted" combo box applies (upper left on the "Other Settings" screen in the CC device). **Add>** all card brands accepted for Auto Debit. Normal retail transactions ignore the Cards Accepted logic.

**Please Select The Credit Card Brands Accepted By This Merchant Account**

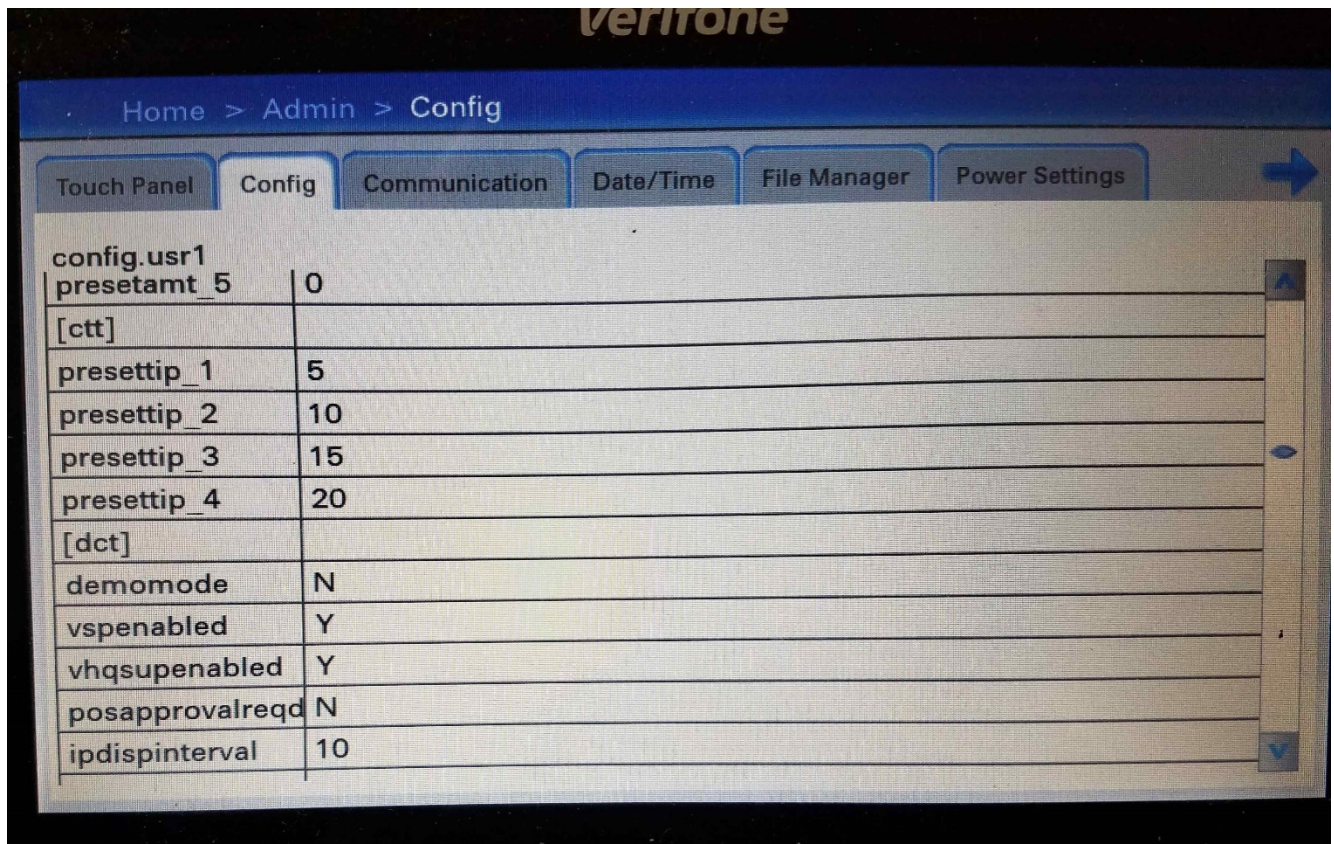
Card Types		Cards Accepted
MilitaryPL	<input type="button" value="Add &gt;"/> <input type="button" value=" &lt; Del"/>	American Express
Debit Card		Visa
GiftCard		Master Card
		Discover



## Change Default Counter Tip Amount (RecTrac)

The MX925s are shipped with the following default tip amounts: 5%, 10%, 15%, 20%, Other, None. The garrison can change these default amounts. *As an Example, the default amounts can be changed to 10%, 15%, 18%, 20%, Other, None.* To make this change follow these steps.

- 1 Press 159 on the keypad to enter the device configuration mode.
- 2 Enter password 166832
- 3 Navigate to Admin • Config and select config.usr1. It will take a minute or so to populate the screen.
- 4 Scroll about a third of the way through the settings until you see the section [ctt]. This section contains the presettip\_1, presettip\_2, presettip\_3 and presettip\_4 entries.



- 5 Use the stylus or your finger to select the entry you want to change. Use the onscreen keyboard or the device keyboard to backspace to clear the current value and enter the new value. Use the Enter key on the keypad (green circle) to save the new entry.
- 6 Return to the Home screen and reboot the device.

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## Troubleshooting (RecTrac/CYMS)

- After setting up and linking all new devices, if you try a CC payment and the screen just flashes back to the payment screen at you (meaning the MX925 reader does not activate), you have an old PINPAD device linked somewhere in the device hierarchy. Check device assignments and unlink any old MX830 pinpad devices OR make sure you linked the POINT PINPAD device.
- During initial reader setup, if at any point the reader says "**VSP Reg Failed,**" something is most likely setup wrong on the account in the PWC gateway. Verify that the device you added to the PWC account is setup correctly. Contact VSI ASP support (800-377-7427 x3909) with questions on the backend setup. They will need to know what Payware account you are expecting the pin pad to be linked to and the serial number of the pin pad.
- During initial reader setup, if you get the following message during the \$1 auth portion:
  - "Failed to complete dummy sale."
  - Something is crossed up with the device linkage back to the merchant account. **Contact VSI ASP support to perform this function:**
- For VSI: In VHQ, schedule the file "Device-Key\_Empty." In PAYware connect, find the device in Device Master and reset the device. This will cause the device to resync. Then schedule a second download job for the applicable EMV media file (i.e. Army-Config-PROD-TIPOFF). Once the reader reboots twice, try the \$1 auth again.
- When registering the RecTrac device to the reader, if you receive the following error:
  - Put/Get functions not allowed on uninitialized memory. (2914)
  - There is most likely an IP conflict. Meaning, the IP you assigned to the reader is already taken on the network. Re-IP the reader and try again.
- When registering the RecTrac device to the reader, if you receive the following error:
  - Response from Registration Attempt: Unable to acquire RSA Context.: Result Code = 0
  - You will need to add a program to the client rtoobj folder, mx915\_register.r. VSI will provide the file. [ftp.vermontsystems.com](http://ftp.vermontsystems.com). \File Updates And Drivers\VeriFone\Point
- When booting the pin pad, you receive an error, failed to get Device Key. The Payware Connect accounts needs to re-generate a key. Contact VSI ASP support to reset.
- Error when attempting to register a pin pad through the RecTrac 10.3 device. Response from Registration Attempt: Unable to connect to mx915 pin pad terminal. Connection timeout for host <ip/port>: Transport TCP:result code = 0. mx925, mx915, VeriFone.
- The registration program is attempting to open a TCP socket between the PC and the pin pad terminal on the ip and port (5015) with an OS command. This process is being blocked. In this instance, it was an Army customer and their Anti-Virus, HBSS, was preventing the OS command from working. Disable HBSS before attempting to register the pin pad. HBSS can be enabled after the registration process is complete.
- To see the Client Request and Response XML files, put the POS in debug mode (Ctrl+F8). When you make the next transaction there will be XML files in this location: <path to>\vs\\WebClientApps\VSI\RecTracLAN\temp.

- When trying to register one of the Credit Card Devices received an Error: Error loading the .net runtime. This maybe because required net assemblies are on a network shared for which the .net framework security policy is set to less full trust (14081).
- Boot into safe mode with network communication and Install the .NET 2.0 SDK and configure .net for Full Frame Access. You should then be able to register the device.
- VHQ and the PWS gateway both use port 443
- VHQ URL: <https://vhq.verifone.com/MessagingServer/MessageHandler.asmx>
- PWC Primary URL: <https://ipcharge2.net/IPCHAPI/rh.aspx>
- PWC Secondary URL: <https://ipcharge.net/IPCHAPI/rh.aspx>