

RM Customer Confirmation Display Interface Installation Guide

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Introduction

The Restaurant Manager Customer Confirmation Display (RMCCD) is an ASI module (Customer Display Interface) allowing the end user to graphically display a virtual guest check on a rear display panel of a POS unit. Items are added to the virtual check in real time as the employee ring them at the POS. This allows customers to view, change and correct orders, which reduces food costs and increases customer satisfaction. Another benefit to the Customer Display Interface is it provides the opportunity for the restaurant owner to advertise on the POS. The marketing section of the RMCCD screen allows for a countless number of rotating images an owner can use to advertise events, show menu items, or coupons. RMCCD also offers the capability to run videos on the rear display screen thus increasing a restaurant marketing opportunities. RMCCD is ideal for quick service establishments but can be used at any POS that has a close proximity to the customer (i.e bars and nightclubs).

The installation is relative easy using these steps:

- Install [Windows .Net Framework 3.5 and 4 Client Profile](#) and [Windows Media Player](#)
- Setup [Multiple Monitors](#) of the POS Stations
- Secure the [Customer Display upgrade code](#), perform the upgrade, [obtain](#) and execute [the RMCCD Installer program](#) on the rmserver.
- Prepare and install the RMCCD program on the [POS Stations](#).
- Configure [RMWin settings](#) including OCDSpooler, RMStart, and Pole Display.
- [Customize the RMCCD Display](#) screen by choosing modes of operations, screen behavior, and [adding images](#).

Note: RMCCD is only compatible with Restaurant Manager version 18.1 or greater.

Overview of Functions

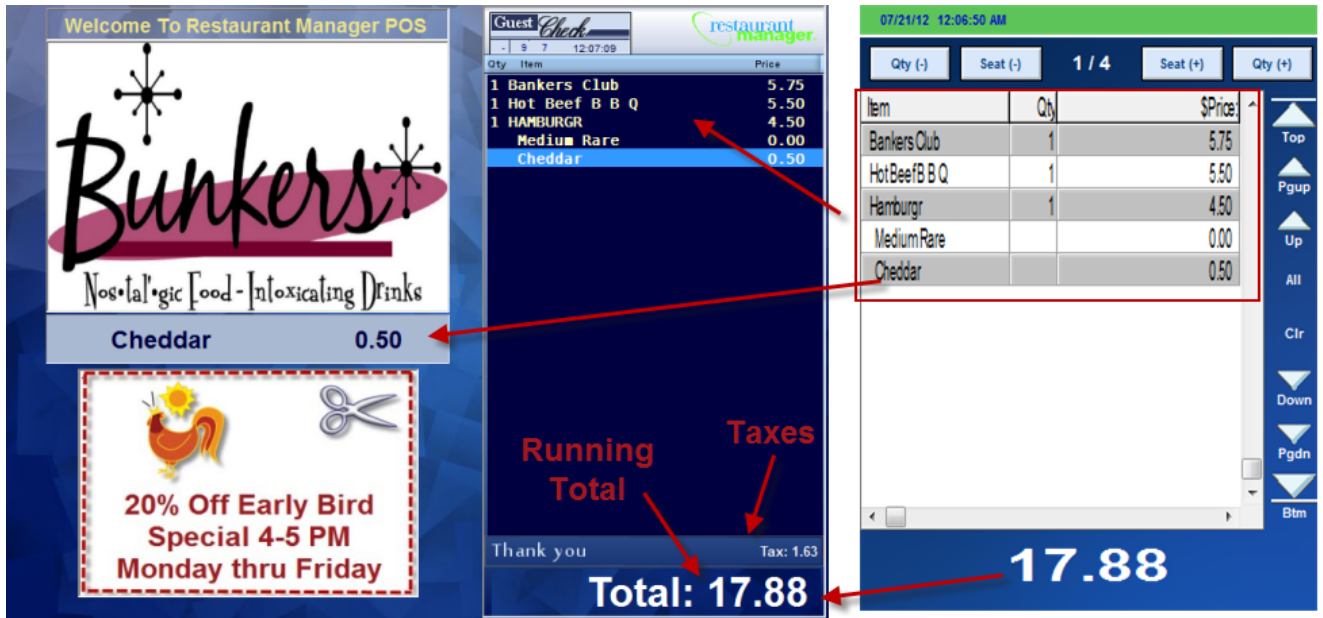
Restaurant Manager's RMCCD interface is designed to be displayed on a customer facing rear display panel attached to a point of sale station. Most sections of the screens are customizable: background colors can be changed, some sections can be [rearranged on screen](#)¹, and menu pictures displayed as they are being rung.



The marketing and logo sections of RMCCD screen is customizable to display a restaurant's [logo](#) and [marketing material](#) in several different formats. At settlement, the marketing section is temporarily replaced with a payment screen showing the payment method and change due. This section can also be customized to show payment type icon in JPG format.

The check display area is designed to show menu items in real time as they are being entered at the POS. The banner below the Check Display area can be customized to change wording and can display for example: Ontario HST tax. The Check Display area also shows the sub-total of menu items entered, with the taxes and the running check total below them.

¹The menu item banner may be placed under the lgo area or on the top of the screen.



RMCCD Screen

POS Check Area

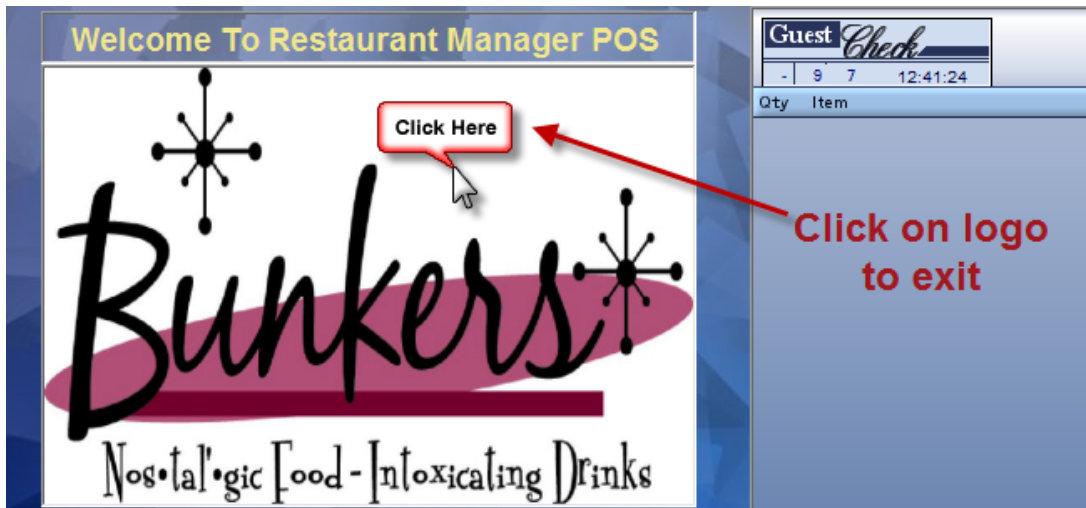
The header of the Check Display area shows the running time. The section also displays the virtual ports used to show the information on the screen.



By default, a menu item banner appears below the Logo section listing the last item entered. The banner is configurable to be placed on top of the screen with larger print. This configuration is ideal for easier viewing when cameras are trained on the POS station.



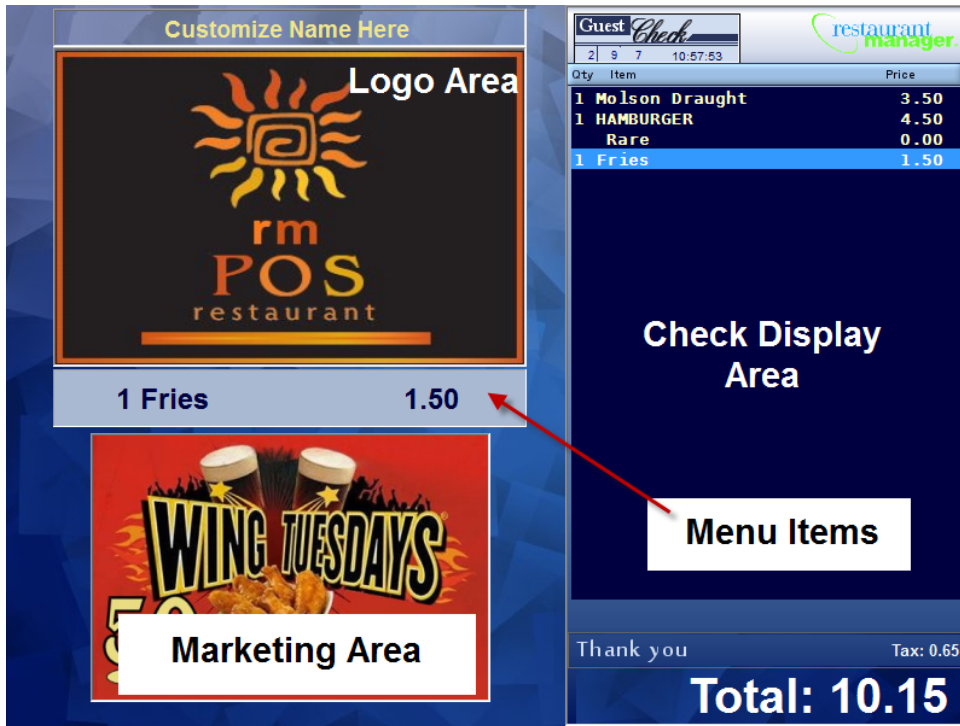
The Logo area has dual functionality. The obvious function is to display the restaurant's logo and menu items when configured. However, you can click on this section of the screen to exit out of the RMCCD screen.



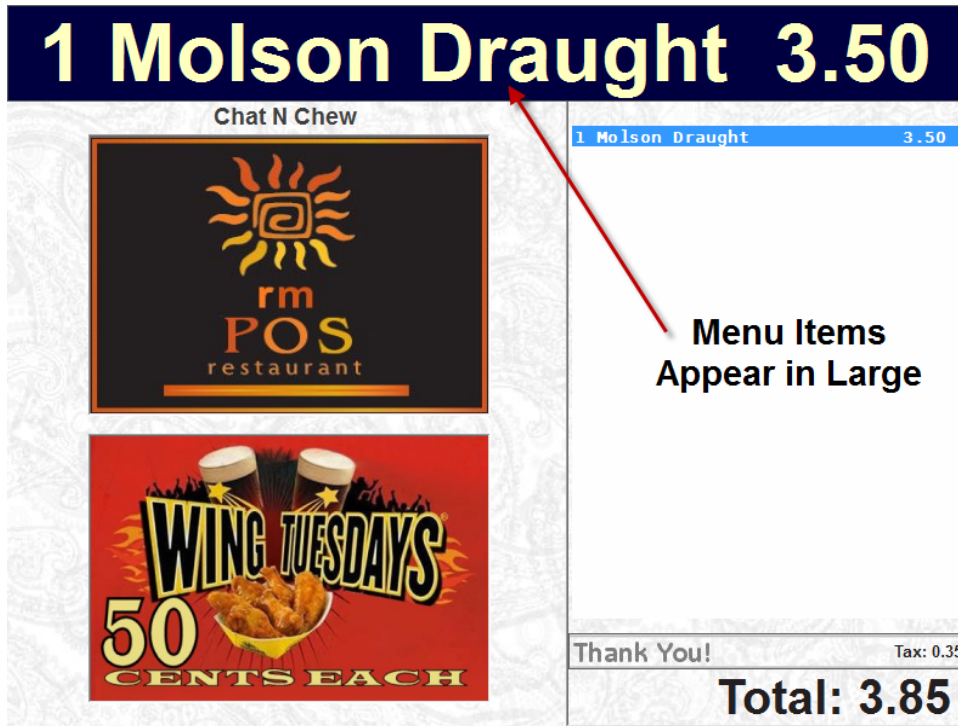
Modes of Operation

There are four modes of operation (listed below). You can change the mode of operation using the Display Mode options in the [RMCCDSetup form](#).

- **Standard Mode**- The Standard Mode has three basic sections: Check Display Area, Marketing Area, and Logo area. The Logo area duals as the area where menu item images are displayed (optional) as the are being selected on the RMPOS module. Menu items name appear between the Marketing and Logo areas.



- Large Item Mode**- Similar to Standard Mode, Large Item Mode has three basic sections: Check Display Area, Marketing Area, and Logo area. The Logo area duals as the area where menu item images are displayed (optional) as the are being selected on the RMPOS module. The main difference between the two modes is Large Item Mode will display the current menu item in an over-sized font at the top of the display making it an excellent resource for 'spotting' in a bar/club environment



- **Compact Mode**- Compact Mode is exactly the same as Standard Mode. Compact Mode is used for 7" displays with a resolution of 800x400.
- **Marketing Mode** - The Marketing Mode has two basic sections: Check Display and Marketing areas. The Marketing area is enlarged and replaces the Logo area and Menu Item area. Menu items will not appear in this mode.

Chat N Chew



Guest *Check*
1 9 7 11:30:22

1 Molson Draught	3.50
1 Howies Famous	9.00
Rare	0.00

Marketing Area
Replaces Logo
and Menu Item
Area

Thank You Tax: 0.80

Total: 13.30

Requirements

The software and hardware requirements for RMCCD are minimal. The following is a listing of what is needed to operate RMCCD on most rear facing displays.

Hardware Requirements

The only hardware requirement is a rear facing customer display. Most of ASI hardware vendors offer a display unit that can be physically attached to the POS. Component systems can offer the same capability with the use of a second monitor. In this circumstance, the computer will need an open video port to attach the second display monitor. This can be achieved by using a second video card or an available VGA / DVI connection.

RM Requirements

You need the Customer Display option enabled in Restaurant Manager.

- **RMCCD**- this program is considered a module so the Customer Display option in the System Upgrade Utility (Upgrade.exe) needs to be enabled. Dealers have to order the Customer Display Interface at initial purchase of the system or obtain the proper upgrade code from ASI to install after purchase.
- **RMCCD Installer**- the installer can be obtained on the ASI website on the Patches & Utilities page. RMCCD Installer will install the RM executables in the rmwin directory and automatically configure most Windows settings. The installer will also download and configure Com0Com for virtual ports required to run RMCCD.
- **RMWIN18.1.2012.09220 build or greater**. RMCCD is not compatible with prior versions of Restaurant Manager.

Windows OS Requirements

RMCCD will run on ASI approved Windows operating systems. Please consult the Restaurant Manager Hardware Requirement Guide on the Reseller Tech Notes and Manuals web page. The following three programs are required to be installed on all computers prior to RMCCD installation:

Net Framework download installation can take up to 15 minutes depending on CPU speed and Internet connection speed. Install both .Net Framework all stations with a rear display at the earliest opportunity:

.NET Framework 3.5 - You may obtain a copy of .Net Framework 3.5 on the Microsoft web site using the following link:

<http://www.microsoft.com/en-us/download/details.aspx?id=21>

.NET Framework 4 Client Profile.- You may obtain a copy of .Net

Framework 4 Client Profile on the Microsoft web site using the following link:

<http://www.microsoft.com/en-us/download/details.aspx?id=24872>

Windows Media Player- Windows media Player should be installed and enabled prior to installation. This program is required for installation. You may install a separate video codec if needed after RMCCD has been completely installed. You may obtain a copy of Windows Media Player 11 on the Microsoft web site using the following link:

<http://www.microsoft.com/en-us/download/details.aspx?id=8163>

Note: Windows validation is required.

Windows Media Player is typically installed in the Window's operating system by default. You can verify the presence of Windows Media Player using one of two methods:

1. Click Windows "Start" button, Click All Programs, and locate Windows Media Player on the programs list
2. Open Windows Control Panel, click "Programs and Features", and click "Turn Windows features on or off"

Additional Software Requirements

RMCCD is capable of running video using Windows Media Player. Installing a video codec pack will increase the variety of video formats that can be played. ASI recommends installing the K-Lite Video Codec Pack. You may obtain a copy of K-Lite Video Codec Pack using the following link:

http://downloadfreely.com/start/?p=InstaCodecs&gclid=CM3J-9zq_7QCFYpFMgodDiMAFQ

Note: ASI does not assume responsibility for downloading and installation of this program. This link has been supplied a reseller and is assumed to be reliable. Be read all disclaimers before downloading and install at your own risk. Note: this is freeware and may attempt to install other third party software.

RMCCD Installation Steps

All Microsoft [component software](#) should be installed (on the rmserver and stations) and the Customer Display Interface should be enabled prior to RMCCD installation. It is also recommended all required hardware is connected prior to installation (follow manufactures instructions). RMCCD installation requires the *RMCCD Installer*. This can be obtained on the Patches and Utilities page on ASI's Dealer Services web site. It is recommended that you have marketing images and logos in .jpg format before you proceed with the installation. Once you have completed the pre-installation requirements you can proceed with installation by following these simple steps:

1. [Install RMCCD on RMServer](#)
2. [Configure Multiple Monitors on POS](#)
3. [Install com0com Null Modem Emulator on POS](#)
4. [Enable and Configure OCD](#)
5. [Configure Pole Display Settings](#)
6. [Configure RMStart](#)
7. [Customize RMCCD](#)

Install RMCCD on RMServer

The RM Customer Confirmation Display Setup Wizard will do the following:

- Install the "com0com" Null-modem emulator, com0com-install.exe, along with the com0com-installer.bat in the rmwin directory. The installer will configure serial settings on the computer. The installer.bat is used to auto configure the Null-modem emulator on the POS systems as mentioned in Step 3 above.
- Configure Window's Firewall inbound settings for port 8000 if "enable Logging is implemented ([see step 8](#))
- Install the necessary dll's (i.e. AxInterop, Interop, and VSutil.dll's)
- RM executables
 - **OcdWrapper.exe**- This executable is a wrapper for OCDSpooler, preventing multiple copies of OCDSpooler from being initialized. OCD-Spooler is needed for the POS to communicate with customer display.
 - **RMCCD.exe**- This executable runs the customer confirmation display program at the POS
 - **POS_Server_UI.exe**- Used when the " usage logging" is enabled ([step nine below](#)). The executable serves as a bridge to send

messages from the POS station to the RM server computer for stations that don't have internet access.

Note: Windows .Net Framework 4 Client Profile must be installed on the rmserver before installing RMCCD.

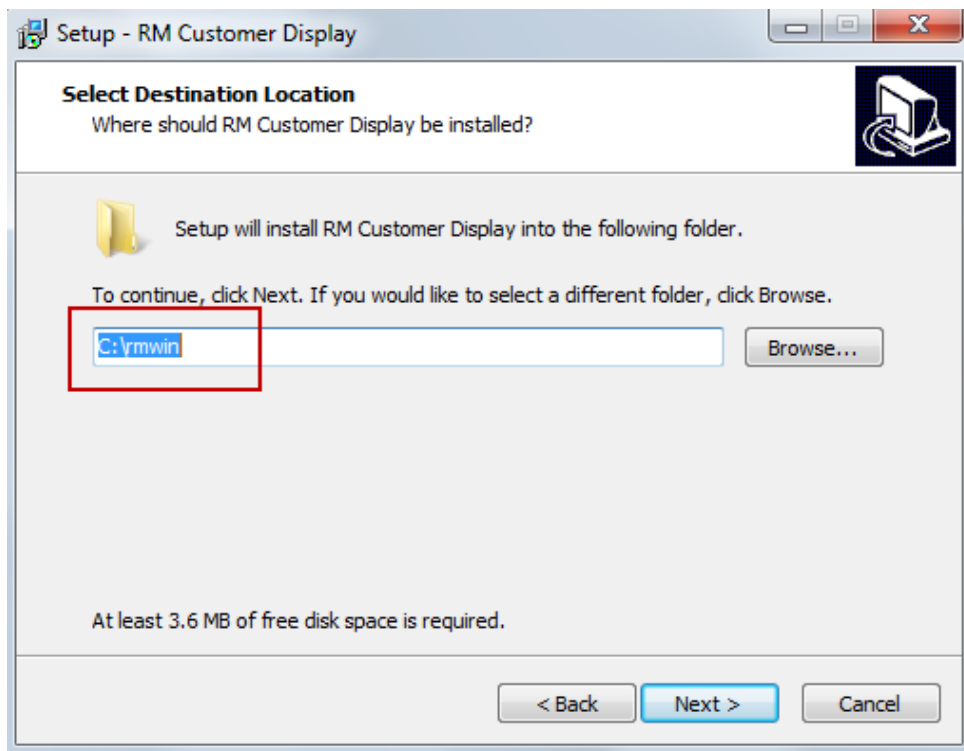
Installation Steps

Proceed with installing RMCCD on the rmserver computer using the following steps:

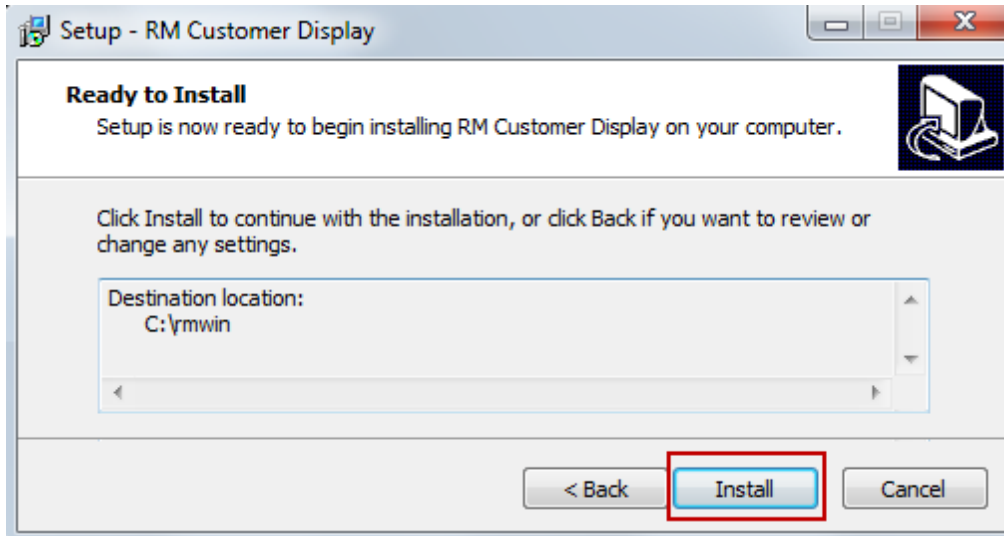
1. Run the RM Customer Display Setup(.exe)



2. Click " Next"
3. Select the directory where RMCCD will be installed (same as rmwin directory). Click "Next" to continue.

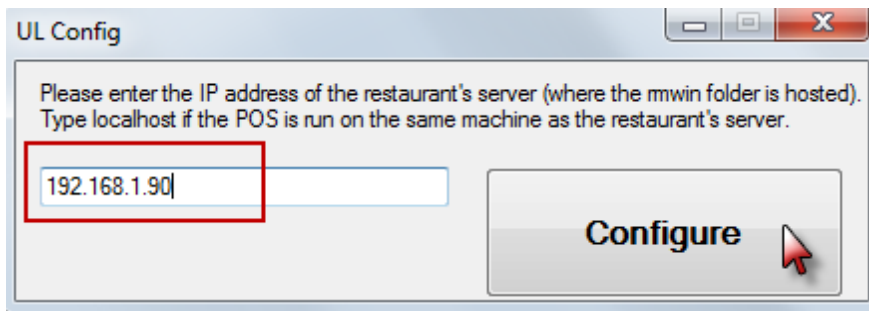


4. Click "Yes".
5. Click "Install" if the directory is correct. If not, click the "Back" button and make corrections. By default, the installer will select "C:\rmwin".

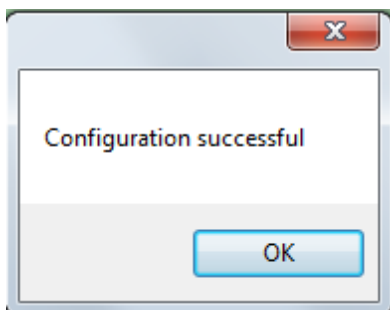


6. In the UL Config Window, enter the server's IP address. Click "Configure."

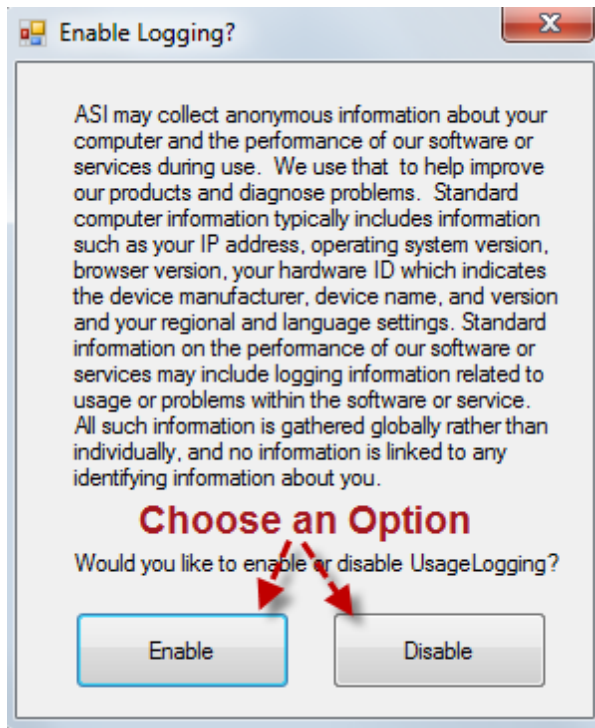
Note: If there is only a single POS station, and that is also the server, you can enter "localhost" here



7. Click "OK"



8. Enable Logging- Read the ASI disclaimer before choosing the Enable or Disable options.



This option requires port 8000 to be available for inbound traffic. The installer will attempt to configure port 8000 in the Windows Firewall. You will have to manually configure Windows Firewall if this attempt should fail. Please see [Appendix 1: Configure Windows Firewall](#) for further instructions.

9. Click "Finish"

Configure POS Stations

Microsoft .Net Framework 3.5 and 4 Client Profile must be installed and multiple monitor should be configured on each POS station prior RMCCD installation. Microsoft .Net 3.5 and Framework 4 Client Profile download installation can take up to 15 minutes depending on CPU speed and Internet connection speed. You should install Microsoft .Net Framework 3.5 and 4 Client Profile at your earliest opportunity. In addition, you must install Windows Media Player on the POS station prior to running RMCCD.

Configure Multiple Monitors on POS

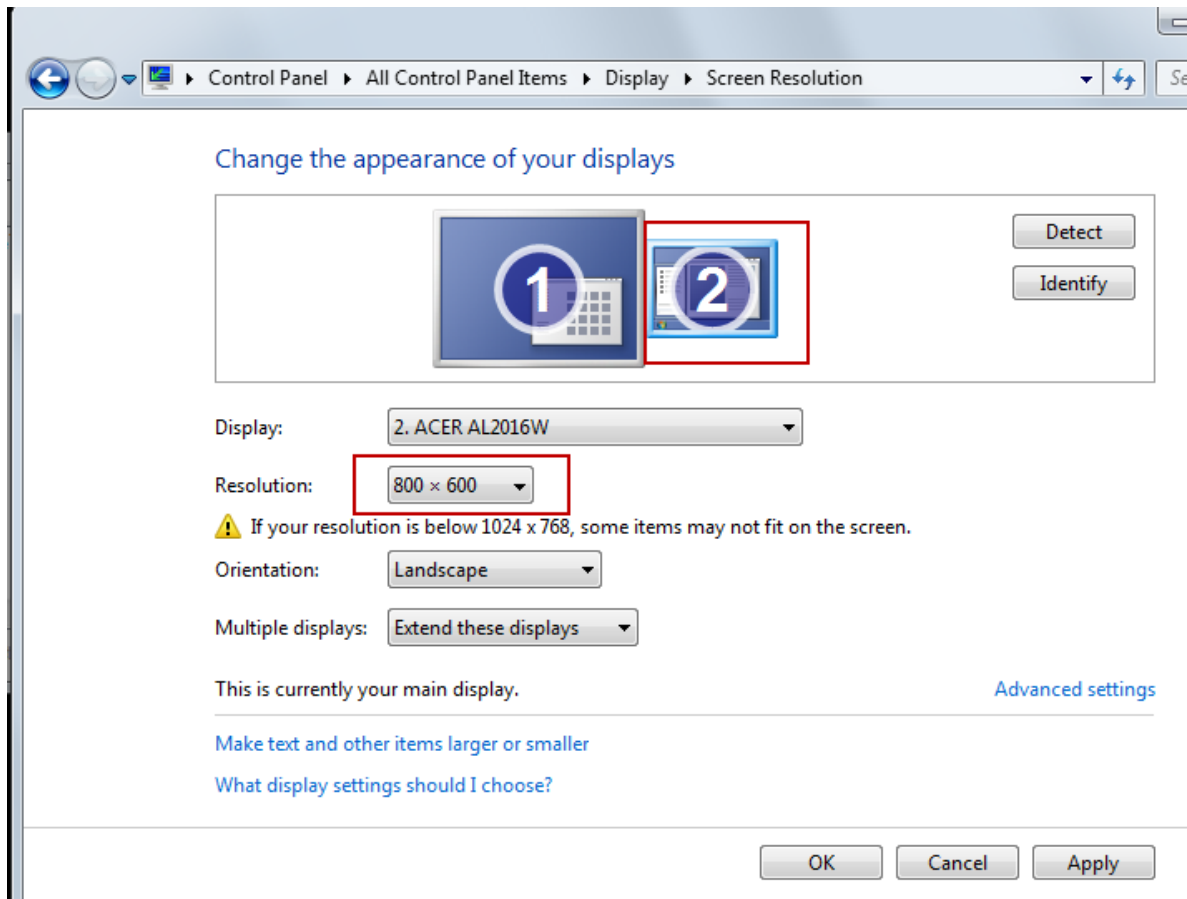
RMCCD is intended to use a second rear facing monitor at the POS. The primary monitor is used for the RMPOS program. Therefore we need to configure the POS Windows software to display the RMCCD on the second monitor while making the primary monitor accessible to enter orders in the RMPOS program. This is done by using Windows Multiple Monitor Display option. Use the following steps for setup depending on which Windows operating system you are using:

Configuration for Windows 7

1. Click Start > Control Panel > Appearance and Personalization > Display > Change Display Settings.

NOTE: To identify which monitors correspond to each icon, click "Identify."

2. Click the monitor icons and drag them into positions. This will essentially determine the movement of the mouse when moving from one monitor to another.
3. Click on the Display drop down menu, select the RMCCD monitor, and use the following settings:
 - **Resolution**- 800x600 for standard displays. 800x480 for 7 inch displays. You will want to use the [Compact display mode](#) if using a 7 inch screen.
 - **Orientation**- Landscape
 - **Multiple displays**- Extend these displays
4. Click "OK" or "Apply" to accept changes.



Configuration for XP Pro

1. Click Start > Control Panel > Display .

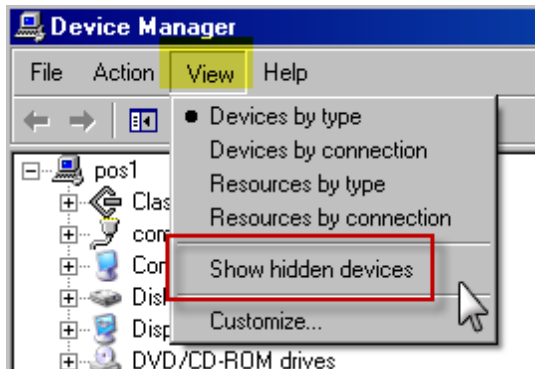
NOTE: To identify which monitors correspond to each icon, click “Identify.”

2. Click the monitor icons and drag them into positions. This will essentially determine the movement of the mouse when moving from one monitor to another.
3. Click on the Display drop down menu, select the RMCCD monitor, and use the following settings:
 - **Resolution**- 800x600 for standard displays. 800x480 for 7 inch displays. You will want to use the [Compact display mode](#) if using a 7 inch screen.
 - **Orientation**- Landscape
 - **Multiple displays**- Extend these displays
4. Click "OK" or "Apply" to accept changes.

Prepare Com Ports

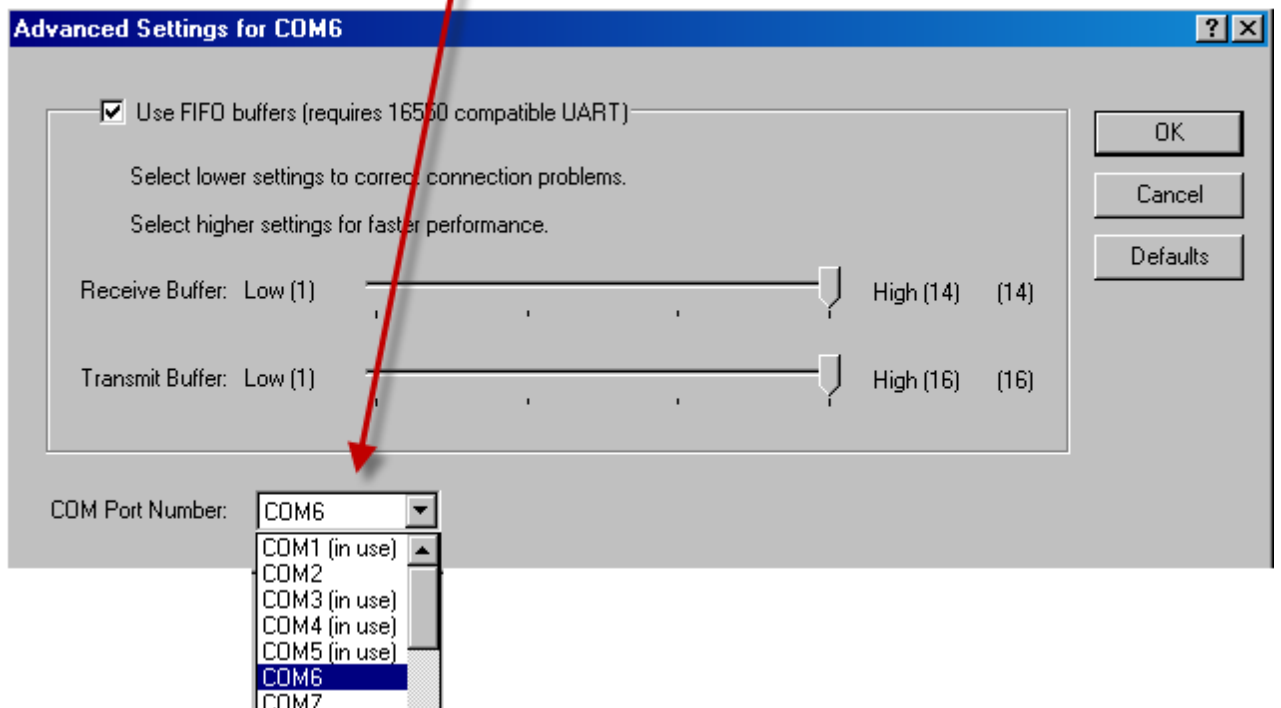
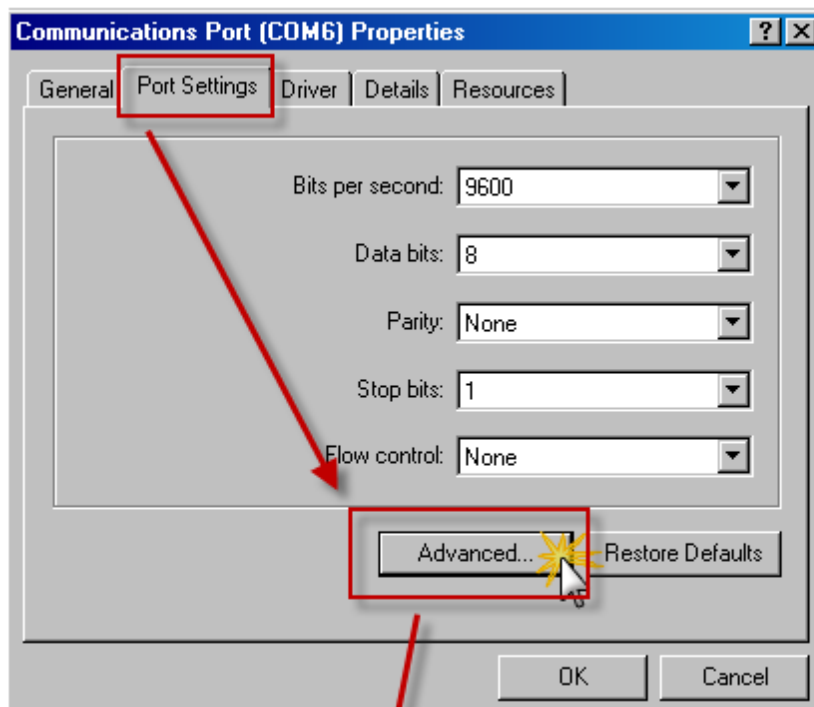
Some Windows operating systems reserve the use of ports. Unfortunately, these same reserved ports are the some of the same RMCCD uses (i.e com6 & 7). The reserved ports are not always visible. The following steps will help find any reserved ports along with instructions for changing port numbers to insure a smooth installation.

1. Open Device Manager, and Click View, Show Hidden Devices.



2. Go to PORTS on the device list and open the menu tree. Select the port (i.e com6) you want to change and double click to access Properties.

3. Select Port Settings, Advanced and change to an unused port (i.e. com16)

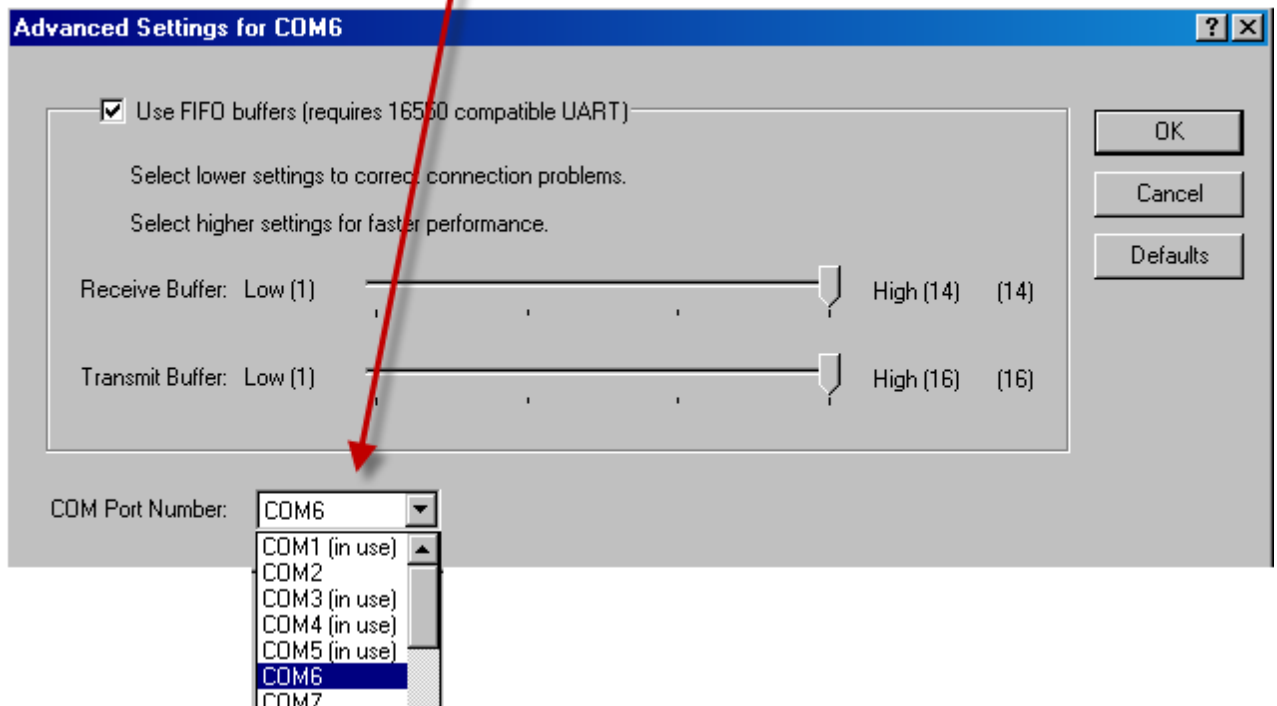
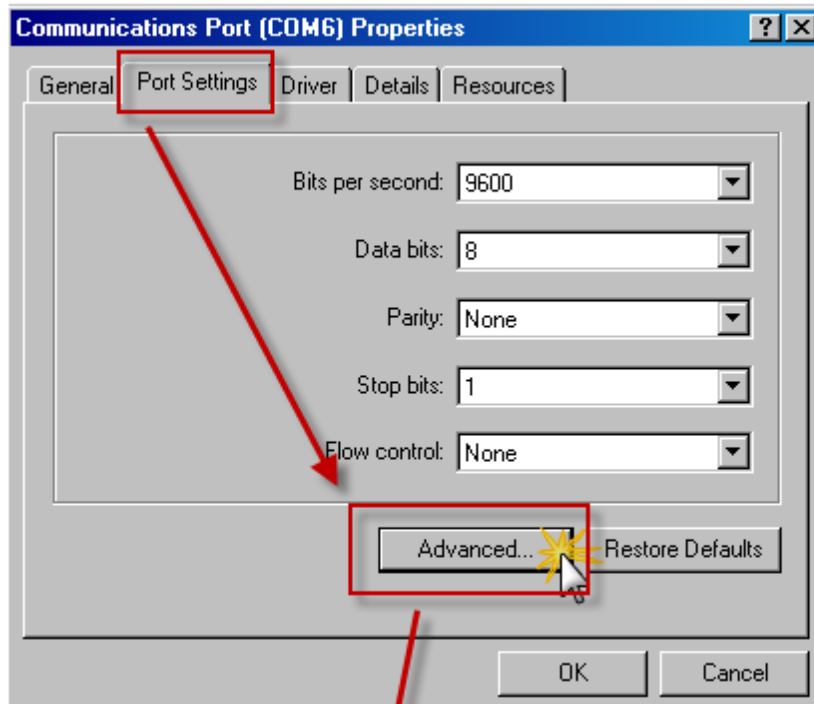


Use the following steps if the ports do not show in the Device Manager

1. Close Device Manager
2. Click Start, navigate to Programs > Accessories, and click Command Prompt.
3. At a command prompt, type the following command , and then click ENTER:

```
set devmgr_show_nonpresent_devices=1
```
4. Type the following command a command prompt, and then click ENTER:

```
start devmgmt.msc
```
5. Re-open Device Manager, click View, click "Show hidden devices" on the View menu in Device Manager.
6. Go to PORTS on the device list, and select the port (i.e. com6) you want to change and double click to access properties.
7. Select the Port Settings tab, click the Advanced button and change to an unused port(i.e com16).



8. Close Device Manager.
9. Close the command prompt.

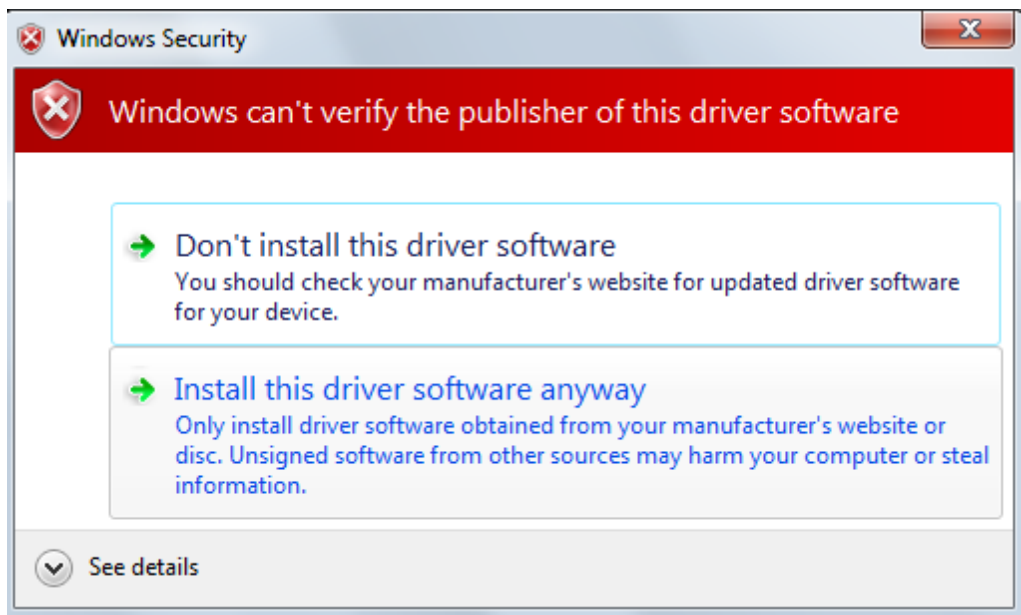
Configure com0com Null Modem Emulator

com0com is a virtual serial port program needed to run the RMCCD interface. Both OCD-Spooler and Customer Pole Display, both essential for displaying images on the rear facing monitor, require the use of this program. The com0com must be installed on every POS Station you intend using RMCCD on. The com0com installation has been made easy for you. During the initial RMCCD installation a batch file named "com0com-setup.bat" was installed in the rmwin directory. The batch file will install and configure the com0com software with all the necessary default settings.

The com0com will attempt to use ports 6,7,8, and 9 when installing. The installation process will fail if these ports already exist on the computer. You should verify these ports do not exist prior to installation. You can verify the existence of these ports using the O/S Hardware Manager. If they are not being used, delete them in the Hardware Manager.

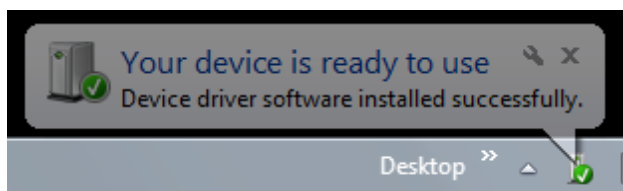
Use the following steps to install the com0Com program:

1. At the POS station navigate to the rmwin directory (i.e. x:\rmwin) and locate the "com0com-setup.bat" file. *Note: do not confuse this with the com0com-install.exe program.*
2. Double click on com0com-setup.bat
3. During the installation process you will see several DOS windows and Windows Securities prompts. Choose the "Install this driver software anyway" option on every Windows security prompt.



All DOS screens will disappear after the program has been installed. You can verify the successful installation by clicking on Windows Start icon > All Programs > verify the com0com folder exists.

Note: You may get a message on the bottom of the POS Station's Window screen stating "Your device is ready to use"



Note: If any errors or problems occurred during installation (i.e com6 is already in use), you must uninstall com0com and reinstall using the steps above. To uninstall com0com:

- Click on Windows Start icon
- Click All Programs
- Select the com0com folder
- Click Uninstall

See the section "[Prepare Com Ports](#)" if you receive the error message "ComX already in use" for any specific com port.

Configure RM for RMCCD

RMCCD requires the use of OCDSpooler and Customer Pole Display Restaurant Manager functions. You will need to use the [OCDSpooler Setup](#) Form and the Customer Pole Display Station Configuration option in the RM BackOffice Module to define the parameter options need for RMCCD. In addition, you will need to add the Restaurant Manager executables (i.e. RMCCD.exe) to RMStart using the Central Program Manager (a.k.a. RMStartsetup).

OCDSpooler Setup

Use the following steps to configure the systems parameters in OCDSpooler Setup. Open the OCDSpooler Setup Form using one of two methods:

- In the RM BackOffice Module- Click on the Utilities Menu and select the OCD Spooler Setup option
- From a command prompt enter the command: c:\rmwin\ocdsetup.exe . Note: In the command given, "C" represents the drive where the rmwin directory resides.

The following data is needed to complete the ASI OCD Setup Form:

Computer Name- Should be the same as the windows computer name on the POS system.

To locate the Computer Name: For Windows 7 - Right Click on Computer> Properties> Find Computer Name. For Windows XP - Right Click on My Computer icon > Properties>Click on Computer Name Tab > find Full Computer Name.

Display Type- use the default setting of Texas Digital Systems. This setting has no impact on the system.

Columns- enter "34" in this field

Rows- enter "99" in this field

Port- By default, the com0com installation script will attempt to use COM8. Verify the port used by com0com by clicking on the Windows Start button on the station, locate the com0com folder in the list of programs, and click on the Setup option. The port used will be listed under the "Virtual Port Pair 1" menu tree.

Baud Rate- 57600

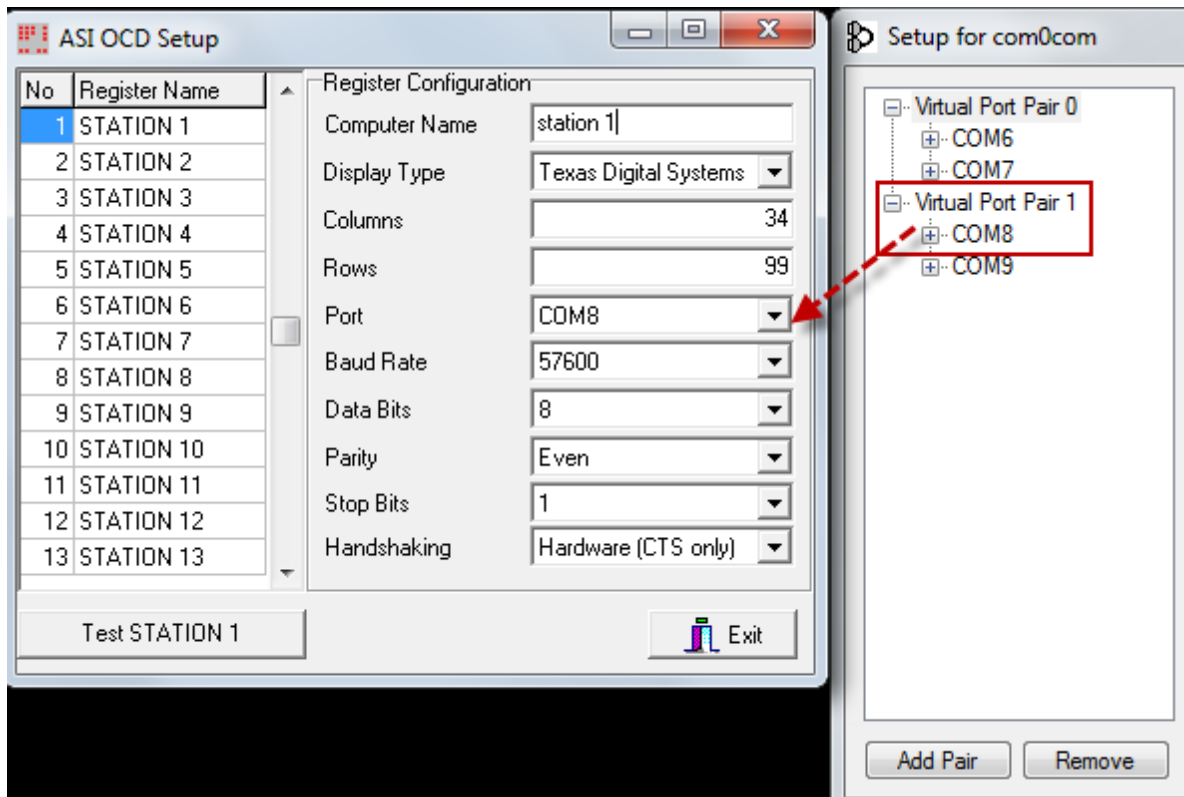
Data Bits- 8

Parity- Even

Stop Bits- 1

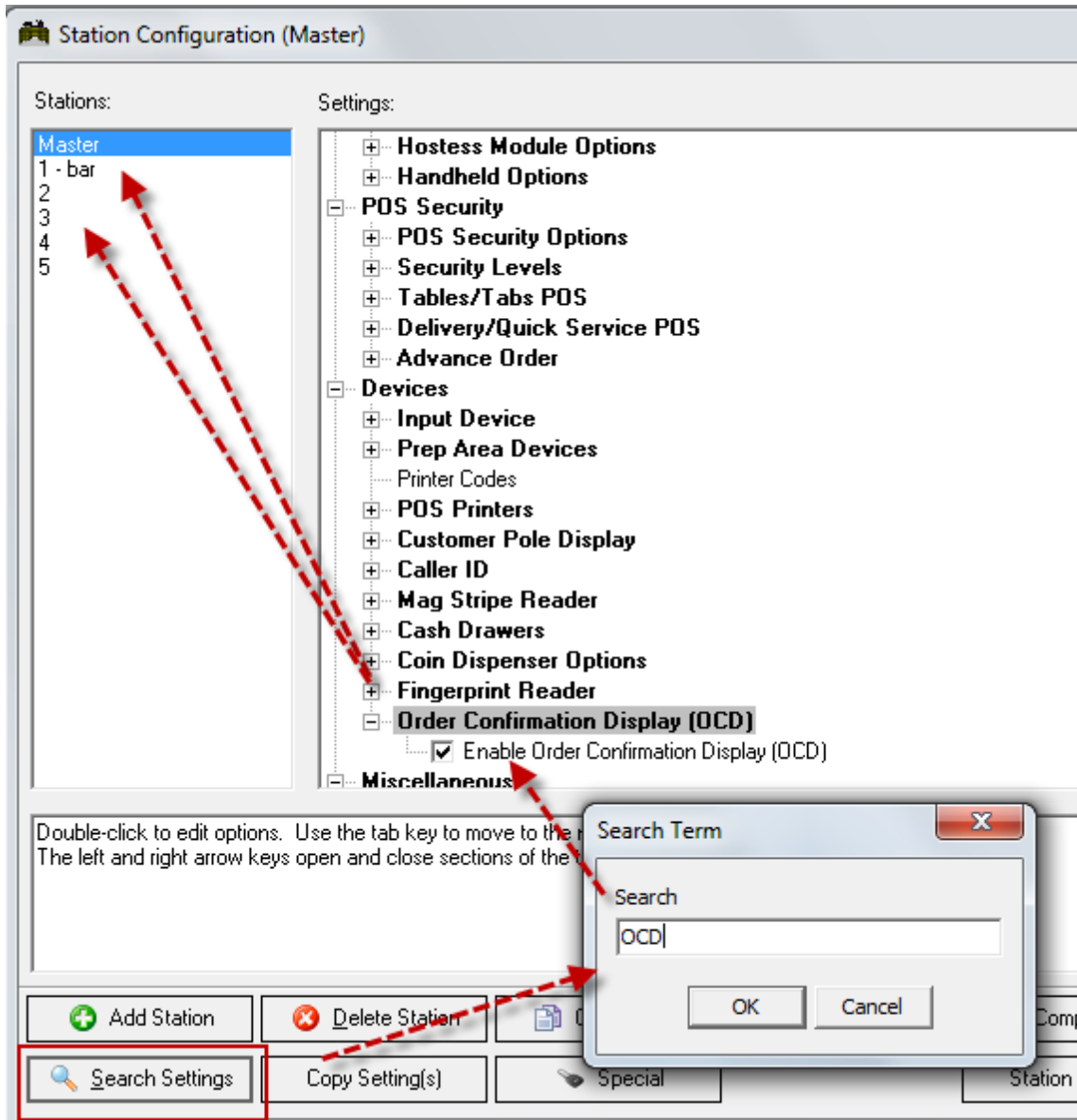
Handshaking- Hardware (CTS only)

The steps outlined above must be repeated for each POS station with a rear facing customer display unit.



Enable OCD

The Order Confirmation Display (OCD) must be enabled for each station running RMCCD. OCD is enabled in the RM BackOffice Module in Station Configuration form. Find the OCD option by clicking on the Setup menu option and then click on Station Configuration. Use the "Search Settings" button and type "OCD" in the Search Term dialog window to locate the OCD station configuration option. Place a check mark in the box corresponding to the "Enable Order Confirmation Display" option. This setting must be enabled on each station running RMCCD.



The next step is to configure Pole Display Settings in the RM BackOffice Module.

Configure Pole Display Settings

Set up the communication parameters for Customer Pole Display in the Station Configuration form found in the RM BackOffice Module. Click on the Setup menu option > Select Station Configuration. Use the "Search Settings" button and type "Pole" in the Search Term dialog window to locate the Customer Pole Display options. Use the following settings to configure the Customer Pole display options:

Terminal Type- Generic

Enable- place check mark in the field box

Primary Output Device- It is likely the port used will be Com 6. Verify the port used by com0com by clicking on the Windows Start button, locate the com0com folder in the list of programs, and click on the Setup option. The port used will be listed under the "Virtual Port Pair 0" menu tree. In our screen shot above COM6 was used. The remaining settings for the Customer Pole Display should be left unchecked.

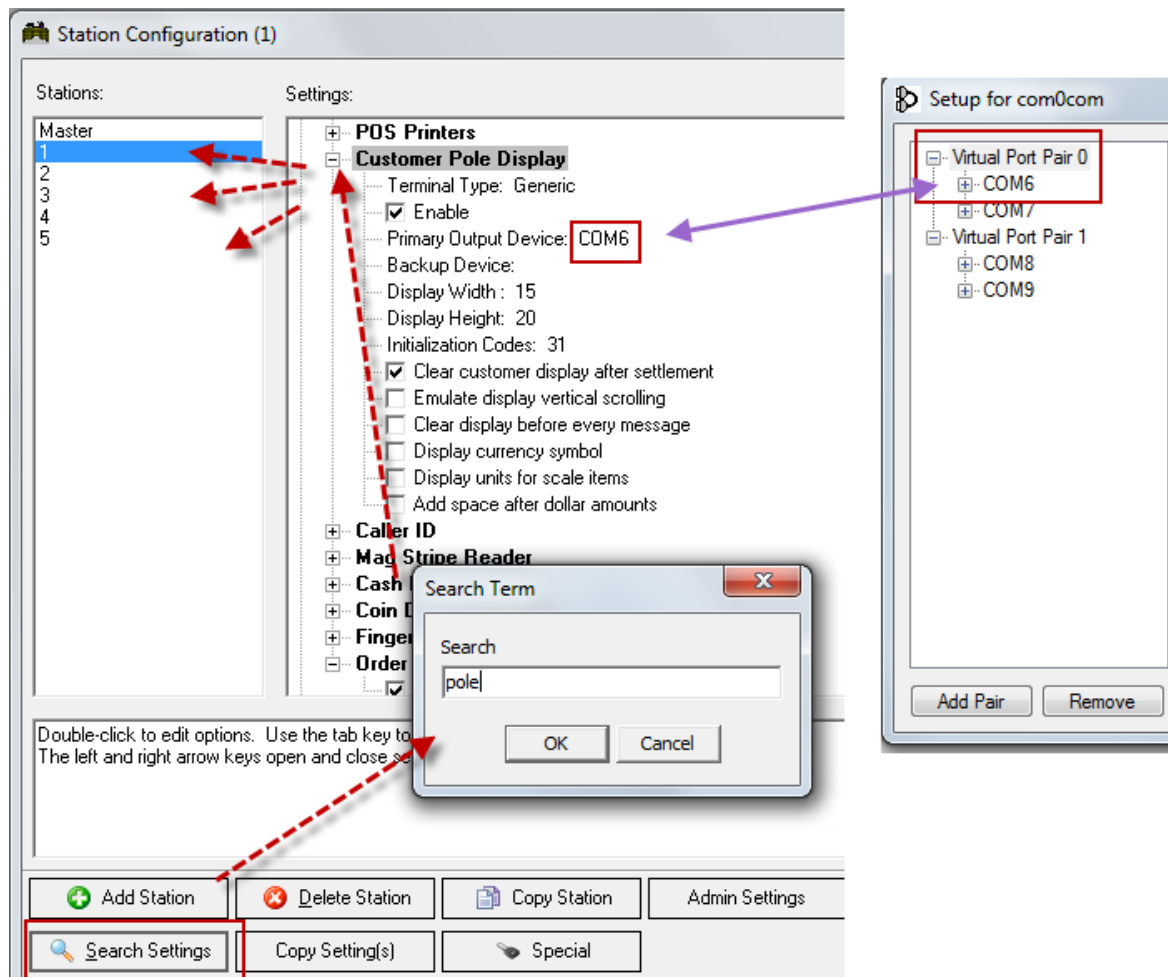
Backup Device - leave blank

Display Width - 20

Display Height - 0

Initialization Codes- 31

The remaining setting for the Customer Pole Display should be uncheck.

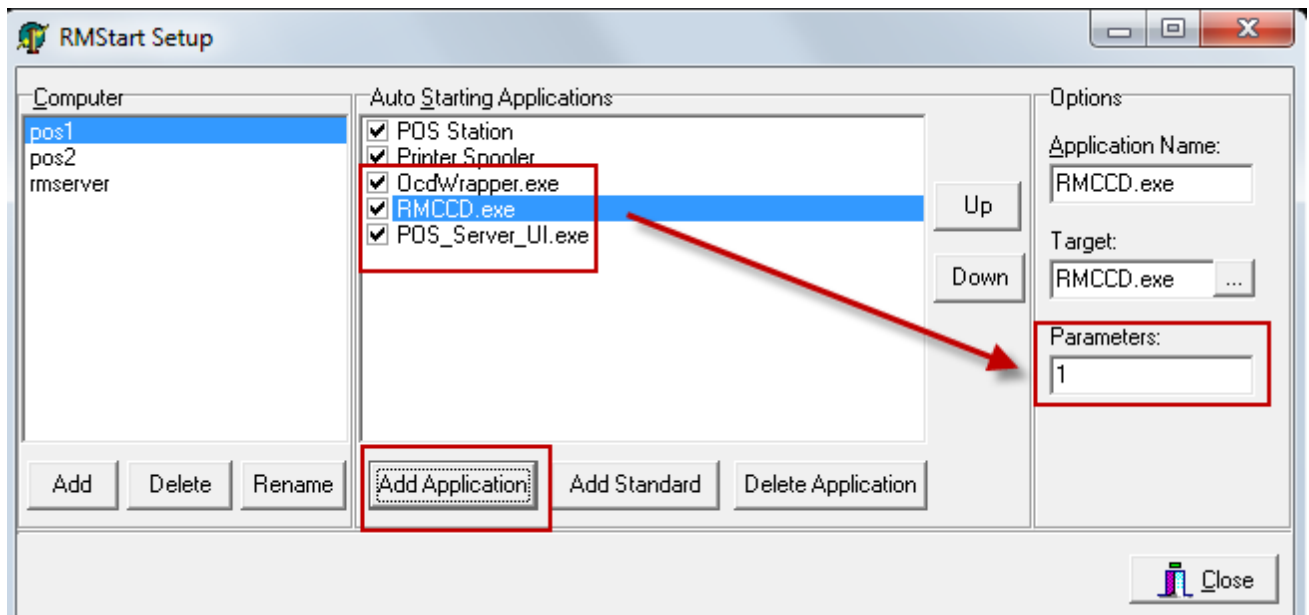


Each station's pole display options must be configured. Use the Copy settings button to expedite the process.

Configure RMStart

Two executables are needed to run RMCCD on each station at startup: OCDWrapper.exe and RMCCD.exe. A third executable, POS_Server_UI.exe, is only needed if "[Enable Logging](#)" was implemented during the RMCCD installation setup process. The executables are added to RMStart using the Central Program manager (a.k.a. RMStart-Setup.exe). The setup form may be accessed using one of two methods:

- Click on the Windows Start button, locate and click on the Restaurant Manager Version 18 folder on the program list, click on Central Program Manager.
- Use the windows run Command (CMD.exe) and enter "c:\rmwin\rmstartsetup.exe". The "C" in the command represents the drive where the rmwin folder resides. The location on the rmwin folder may vary depending how your system is configured.



To Add the OCDWrapper Executable

This executable is a wrapper for OCDSpooler, preventing multiple copies of OCD-Spooler from being initialized. OCDSpooler is needed for the POS to communicate with customer display. Add the executable to RMStart using the following steps:

1. Select the computer on the Computer List column where you are adding the rear customer display.
2. Click the Add Application button under the Auto Starting Applications section of the form.
3. In the Add Application dialog box maneuver to the Application field and type "OCDWrapper.exe". Alternatively, use the ellipses button to the right of the field to browse to its location. However, you will need to change the command since you

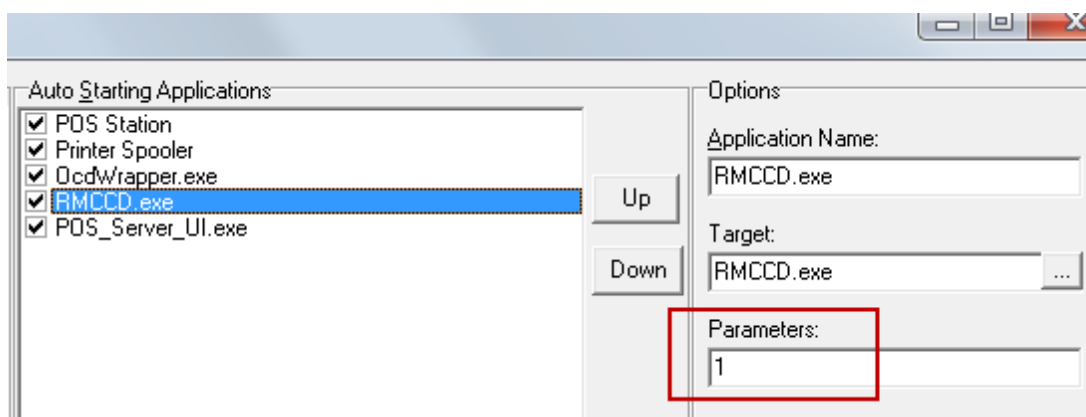
are browsing from the rmserver. It is required you remove the "C:\rmwin\" section of the command since this is operating over a network.

4. Type OCDWrapper in the "Descriptive application name" field. This field will auto-fill if you browse to the executables location.

To Add the RMCCD Executable

This executable runs the customer confirmation display program at the POS. Add the executable to RMStart using the following steps:

1. Select the computer on the Computer List column where you are adding the rear customer display.
2. Click the Add Application button under the Auto Starting Applications section of the form.
3. In the Add Application dialog box maneuver to the Application field and type "RMCCD.exe". Alternatively, use the ellipses button to the right of the field to browse to its location. However, you will need to change the command since you are browsing from the rmserver. It is required you remove the "C:\rmwin\" section of the command since this is operating over a network.
4. Type RMCCD in the "Descriptive application name" field. This field will autofill if you browse to the executables location.
5. Click "OK"
6. Click on the Parameters field under the Options section of the RMStart Setup form and type the number of the [Rmccd.xml](#) file you are using. Example: you would type in "1" for POS station 1. Enter the specific station rmccd.xml file if you are using [multiple XML files](#).



To Add the POS_Server_UI Executable (optional)

You need only to add this executable if "usage logging" was enabled [during RMCCD installation setup](#). This executable serves as a bridge to send messages from the POS

station to the rmserver computer for stations that do not have internet access. Add the executable to RMStart using the following steps:

1. Select the computer on the Computer List column where you are adding the rear customer display.
2. Click the Add Application button under the Auto Starting Applications section of the form.
3. In the Add Application dialog box maneuver to the Application field and type "POS_Server_UI.exe" (the underscores in the name are needed). Alternatively, use the ellipses button to the right of the field to browse to its location. However, you will need to change the command since you are browsing from the rmserver. It is required you remove the "C:\rmwin\" section of the command since this is operating over a network.
4. Type "POS Server UI" in the "Descriptive application name" field. This field will autofill if you browse to the executables location.

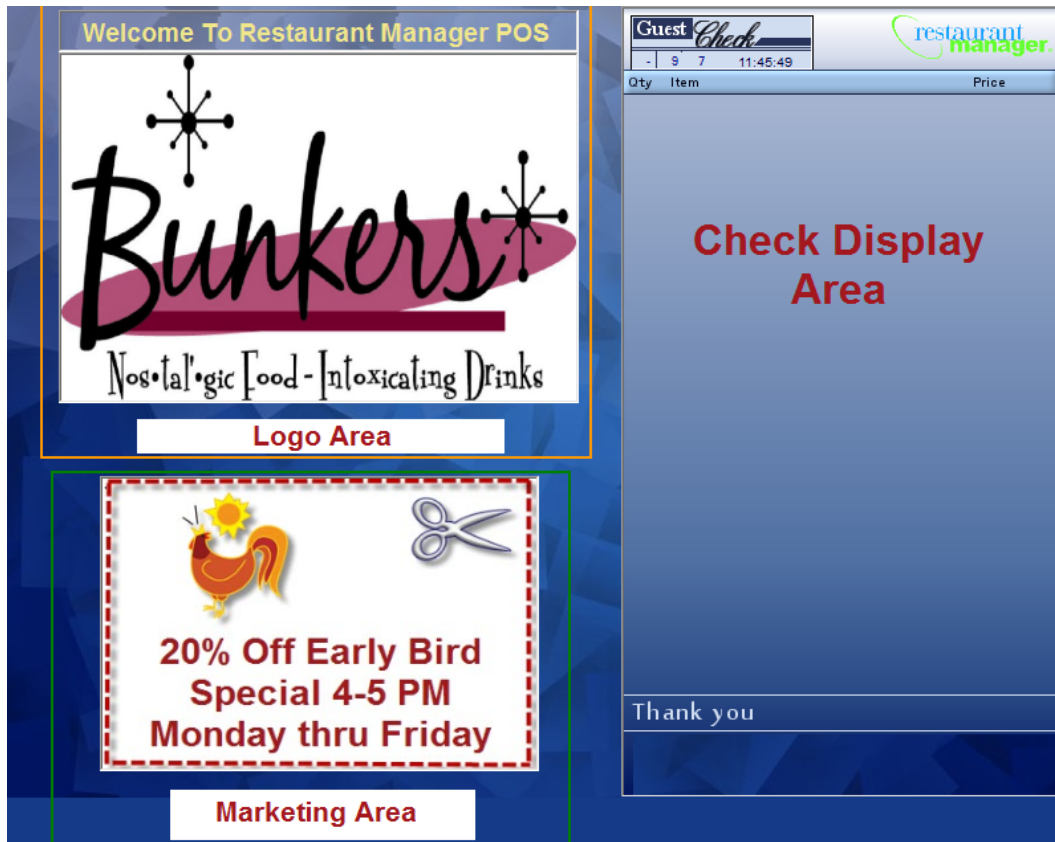
Configure RMNetmon

The following is a list of commands you need to add to the kill list if using RMNetmon. RMNetmon's kill list is altered using the ini file on the POS computer:

- rmccd.exe=1
- ocbspool.exe=1
- pos_server_ui.exe=1

RMCCD Customization

RMCCD screen at the POS is separated into three sections: Check Display Area, Logo Area, and Marketing Area. The Check Display Area is not configurable. However, restaurants may add their logo and custom marketing material. The marketing section can be populated with single, multiple jpg images, or videos. The following sections provide simple instruction on how you can customize the RMCCD screen at the POS.



Important: Clicking on the Logo section of the RMCCD screen will exit out of the program.

RMCCD Setup Form

RMCCD behavior is configured using the RMCCD Setup Form. Use the Reload Stations button on the bottom of the form affect changes at the POS. The options within the form can be used to:

- Change a [restaurant name](#)
- Set [time intervals](#) for images to appear on screen
- Add [images to modifiers](#) on screen

- Change [color schemes](#)
- Change the [format](#) (mode) of how sections are displayed on the screen
- Set up [different screen configurations](#) based on stations

Note: the options configured in the RMCCD setup form are kept in the [Rmccd.xml](#) file. The rmccd.xml file is located in the rmwin folder and is also editable using notepad.

Use the following settings below to customize your rear display:

- **Configure Multiple Stations** - Each station can use the same configuration (Rmccd.xml) file if all settings are the same. However, if you want different stations to use different modes, colors, etc you may create a station specific XML file such as rmccd2.xml for station2. Use the following steps to create different configurations for POS stations:
 1. Click on the Station Settings field box on the Select Station section of the setup form
 2. Click on the Up and Down arrows under the Station Number section to enter the station number.
 3. Click on Create Station
 4. Click on the Station Settings field box to remove the check mark. This action will deactivate the settings below
 5. Repeat steps 2 and 3 to create additional stations

Use the drop down menu under Select station and choose the station you wish to configure.

If you multiple station configurations, you must add the specific station number in the parameter section of [RMStartsetup](#) form for the station.

- **Restaurant Name to Display** - Click on the field and type the name of the restaurant
- **Marketing Interval**- This setting controls the number of seconds each marketing image will display. Valid values: 0-10 (0=disable)
- **Marketing Mode**- The default setting is "Common". In common mode, RMCCD will use images stored in \rmwin\ocdimages\marketing. However, you may choose to use different marketing images at different stations to enhance promotions specific to a revenue center (i.e. bar vs takeout). If this is the case, use the "By Station" option. The "By Station" option requires a separate subfolder to hold the marketing images. Example: station 2 would use \ocdimages\marketing\2
- **Change Due Display**- use the drop down menu to enter the number of seconds the change due window is displayed. The default setting is 15 seconds.

- **Modifier Images**- Use the drop down menu to choose between No or Yes. Choose "No" to not show images on modifiers, choose "Yes" to show images on modifiers. The default setting is "No"
- **Region** - Use this setting to display regional tax settings displayed on the screen. The default setting is United States. The Canada option will display HST instead of TAX.
- **Local Drive Letter**- C is used by default. Enter the drive letter if different from c drive. when Rmccd first loads, it creates a local folder on the hard drive of the POS station and copies all the marketing images& videos from the server to the local hard drive to reduce network load/bandwidth usage as the images are displayed on the RMCCD
- **Logging**- the default setting is Yes. This setting determines whether RMCCD will send any messages back to the main server. The time interval for this setting is controlled with the Logging Interval option.
- **CCD Input Port**- The port number used in this field is the same used in com0com and OCDSpooler.exe on the station. Typically the number in this field would be 9 if the com0com pair setting for Virtual Port Pair 1 are com 8 and 9. Do not change this number unless directed to.
- **PD Input Port** - The port number used in this field is the same used in com0com and Customer Pole Display on the station. Typically the number in this field would be 7 if the com0com pair setting for Virtual Port Pair 0 are com 6 and 7. Do not change this number unless directed to.
- **Diagnostic Mode**- By default this is set to NO. Setting to Yes allows viewing test script under the Check Display area.
- **Logging Interval** - the default setting is 1 hour. This setting controls the length of time (hours) between RMCCD on the station to send "I'm alive" messages to the main server. The Logging option must be set to "yes" to active the field.
- **Color Scheme** - Click on the radio button next to the color scheme you want to use for the screen background. You may customize any of the skins by [modifying the images](#) in \Ocdimages\System\Skins.
- **Display Mode** - Click on the radio button next to the display mode you want to use:
 - **Standard**- The Standard Mode has three basic sections: Check Display Area, Marketing Area, and Logo area. The Logo area duals as the area where menu item images are displayed (optional) as the are being selected on the RMPOS module. Menu items name appear between the Marketing and Logo areas.
 - **Large item** - Similar to Standard Mode, Large Item Mode has three basic

sections: Check Display Area, Marketing Area, and Logo area. The Logo area duals as the area where menu item images are displayed (optional) as the are being selected on the RMPOS module. The main difference between the two modes is Large Item Mode will display the current menu item in an over-sized font at the top of the display making it an excellent resource for 'spotting' in a bar/club environment

- **Compact** - Compact Mode is exactly the same as Standard Mode. Compact Mode is used for 7" displays with a resolution of 800x400
- **Marketing** - The Marketing Mode has two basic sections: Check Display and Marketing areas The Marketing area is enlarged and replaces the Logo area and Menu Item area. Menu items will not appear in this mode.

RMCCD XML

RMCCD is configurable using the Rmccd.xml file for the settings listed below. Each station can use the same Rmccd.xml file if all setting will be the same. However, if you want different stations to use different modes, colors, etc you may create a station specific XML file such as rmccd2.xml for station2. The rmccd.xml file is located in the rmwin folder and is editable using notepad. The following is a list of XML values:

marketing_seconds - This setting controls the number of seconds each marketing image will display. Valid values: 0-10 (0=disable)

ocd_input_port = Com Port for OcdSpool input (do not change this number unless directed to)

cpd_input_port = Com Port for Customer Pole Display input (do not change this number unless directed to)

color = 'Skins / Colors' - Valid Values: C (blue), W (white), Y (yellow), B (brown). You may customize any of the skins by modifying the images in \Ocdimages\System\Skins

ocd_mode = L for 'Large Item Mode' ; S for Standard Mode ; 7 for small 7" 800x480 screens (for more information see Modes of Operation section) ocd

region = Regional Mode: U for USA , O for Ontario (O will display HST instead of TAX)

images_on_mods - N for do not show images on modifiers, Y to show images on modifiers.

Localdrive- C is used by default. Enter the drive letter if different from c drive. when Rmccd first loads, it creates a local folder on the hard drive of the POS

station and copies all the marketing images& videos from the server to the local hard drive to reduce network load/bandwidth usage as the images are displayed on the RMCCD

change_due_delay = number of seconds change due windows is displayed. The default setting is 15 seconds.

diagmode- by default this is set to N (no). Setting to Y allows viewing test script under the Check Display area.

aliveTimer- the default setting is 60 (minutes). This setting controls the length of time (in minutes) between RMCCD on the station to send "I'm alive" messages to the main server.

Logging- the default setting is Yes. This setting determines whether RMCCD will send any messages back to the main server.

Using Images with RMCCD

RMCCD comes with several preset images. The images are installed directly into the rmwin directory (i.e. c:\rmwin) in a subfolder named "ocdimages". The ocdimages folder has three subset folders:

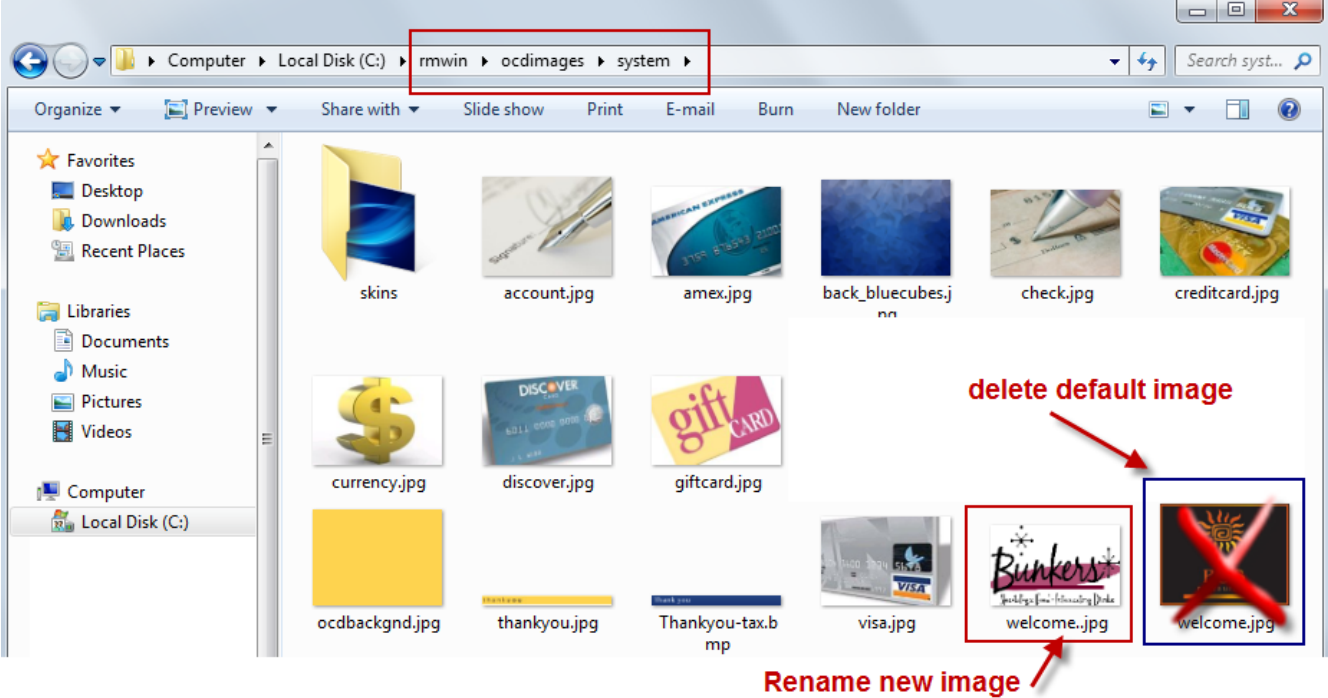
- **System**- the system folder contains several preset images used for payments and the store logo on the RMCCD screen. The system folder also contain a subfolder named "Skins". The images in this folder are used for the RMCCD background. Images used for the purposes described above must be JPG format.
- **Marketing**- the Marketing folder contains images used to display on the marketing section of the RMCCD screen. Still images used for marketing must be in JPG format. Videos may also be used on the RMCCD screen. Video must be placed in this folder. The Temp subfolder contains extra images that can be used if needed but have no direct functionality.
- **DM Marketing**- This folder contain extra images but has no direct functionality.

Note : the Ocdimages folder is also used to store menu item images if you choose to display them on the RMCCD screen.

Adding a Logo

During the RMCCD installation process a folder named "ocdimages" was added to the rmwin directory. Within the ocdimages folder there is a subfolder named "system". It is in this folder where you will add the customer logo. By default, a welcome.jpg image is added to the folder during the installation process. Simply delete this image and add the new logo jpg image. The image must be named "welcome" and be JPG format. The

default image will be displayed on the screen until you correctly rename the new image.w



Note: images must be in JPG format

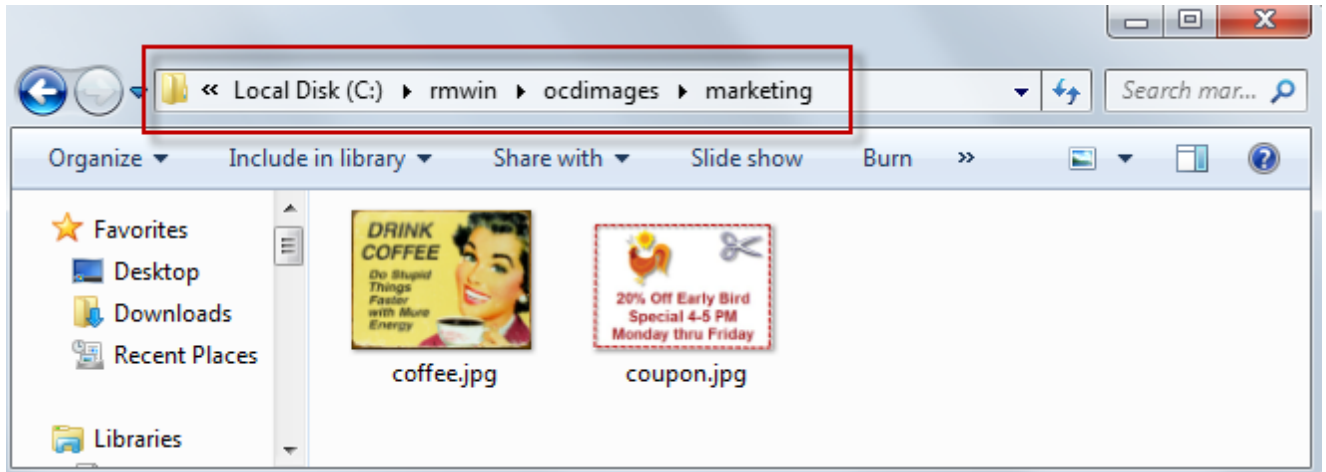
Adding Marketing Images

During the RMCCD installation process a folder named "ocdimages" is added to the rmwin directory. Within the ocdimages folder there is a subfolder named "marketing". It is in this folder where you will add the JPG marketing images. Marketing materials can either be static JPG images or in various video formats. Both formats can be used at the same time on the RMCCD monitor.

The time length each image is displayed on the RMCCD screen is controlled in [RMCCDSetupform](#). Use the Marketing Interval setting to set the interval time from 1- 10 seconds

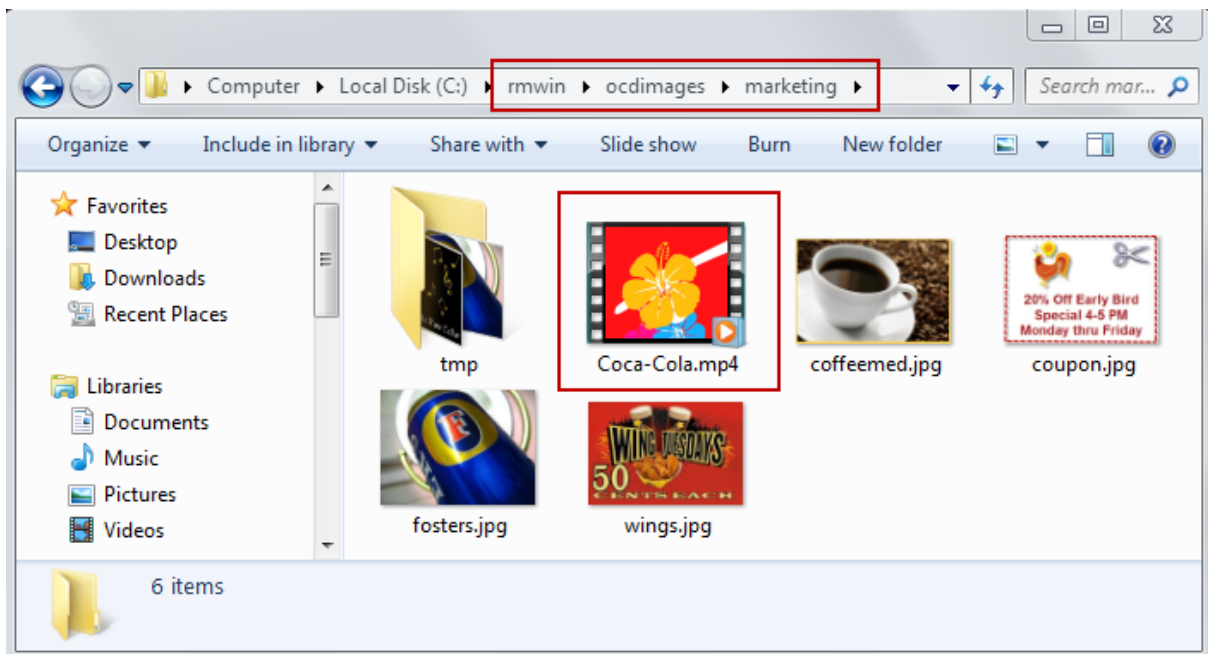
Adding Static Images

JPG images sized around 374x260 pixels appear the best on the screen. You have the option to add single or multiple JPG images to be displayed at the POS. Images will appear as a slideshow at the POS when multiple images are placed in the marketing folder. The order in which the images appear are dependant on how the are arranged in the marketing folder.



Adding Videos

Videos are added to the RMCCD screen at the POS Similar to adding static JPG images. Simply place the video in the marketing subfolder. Windows Media Player is capable of only running certain types of video. You should consider installing a video codec pack to increase the variety of video formats to be used for marketing. There are several video codecs on the market. K-Lite is one such direct show codec that has been successfully used with RMCCD at live sites.

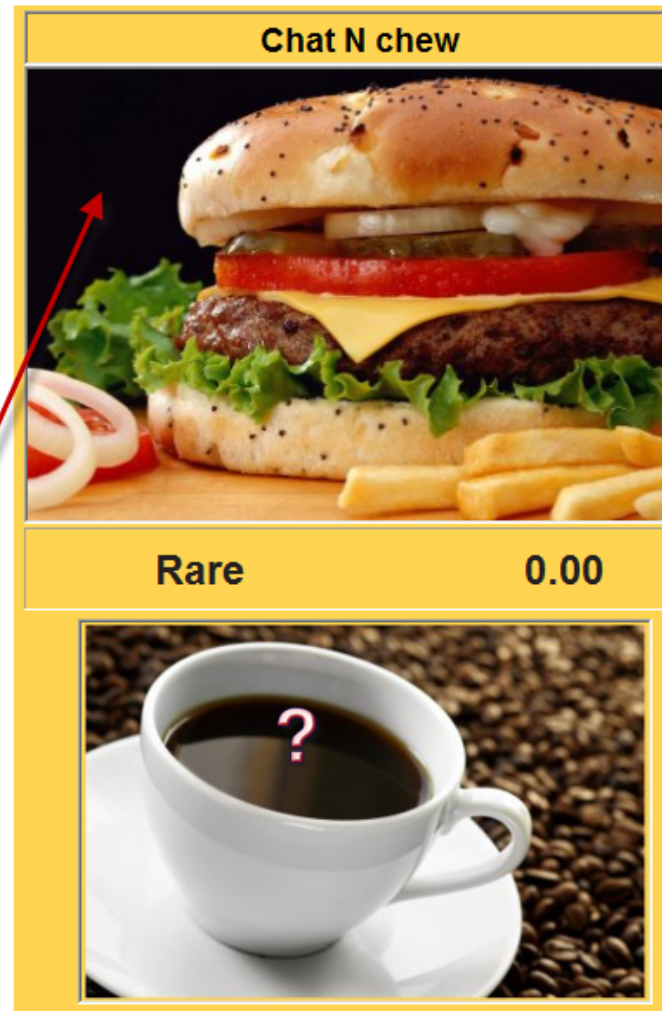
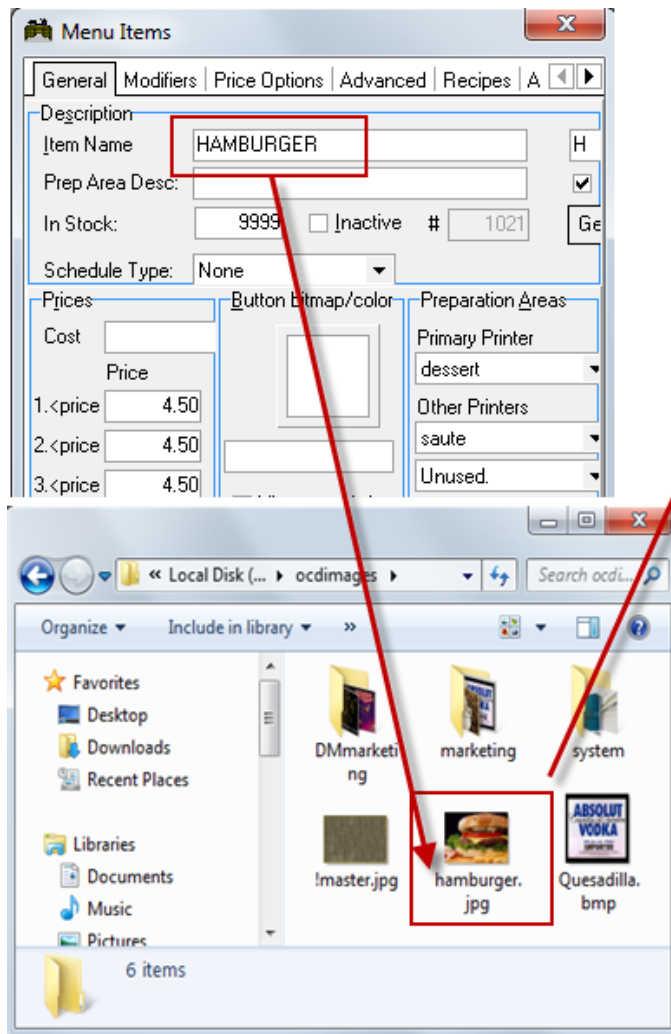


Adding Menu Item Images

Menu items may be displayed on the screen as they are being order. Images of menu items will supplant the logo if used. Simply save the menu item image in the OCDIM-AGES folder with a filename exactly the same as the menu item name in RM menu Setup form. The name used must include any spaces between words in the item name. All images must be in JPG format.

For example, as shown in the screen shot below, the item being ordered is “Hamburger”. The corresponding image for that item is “Hamburger.jpg”

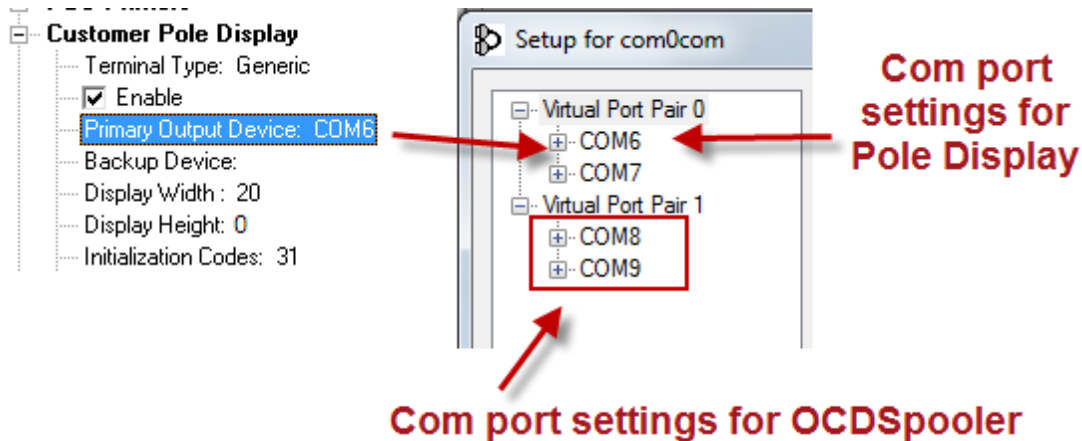
Note the same procedure is used for adding images for modifiers.



Google Images is a great source to obtain images. You may also use the images contained in the OO Photos For OO folder within the rmwin directory.

Trouble Shooting RMCCD

Error message: "Com Port not in use"- the com port setting used in the OCD Spool Setup or Pole Display setup does not match the virtual ports used in com0com. Verify the virtual ports being used in com0com (Start > Programs > com0com > Setup) and correct either the Pole Display setting in Station Configuration or in OCDSpooler Setup.



ComX Already In Use- The Operating system reserved the use of the port identified in the error message. You must uninstall com0com, assign new port number to the reserved port and re-install com0com. See the section on [Preparing Com Ports](#) and [Uninstalling com0com](#) for specific instructions.

Phantom or deleted images appear in the marketing section- this is a known issue for the initial build of RMCCD

Welcome Logo appear on screen this is the default logo. New images must have the name "welcome.jpg" regardless of what they show in the picture.

Change Due does not appear on the screen- Make sure the Customer Pole Display is enabled in Station Configuration, display width is set to "20" and Display Height is set to "0".

Simple Serial has stooped working - this message may occur when executing RMCCD.exe. A common cause for this is is the a station number is not defined as a parameter in RMStartup.

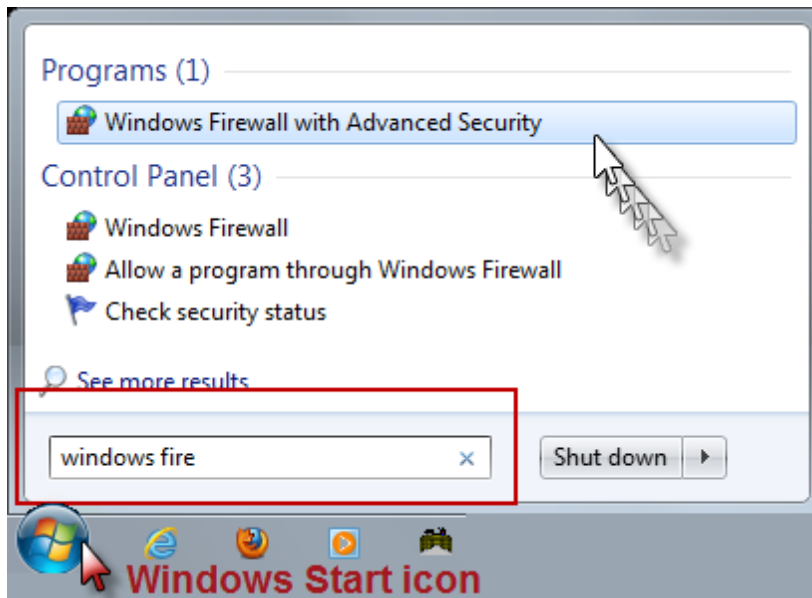
Appendix: Firewall Configuration

The RMCCD installer attempts to create firewall inbound rules for port 8000 on the rmserver computer. Port 8000 is need when [Enabled Logging](#) is enabled. If the automated configuration should fail for some reason, you will have to manually configure Windows firewall on the rmserver for the OS you have:

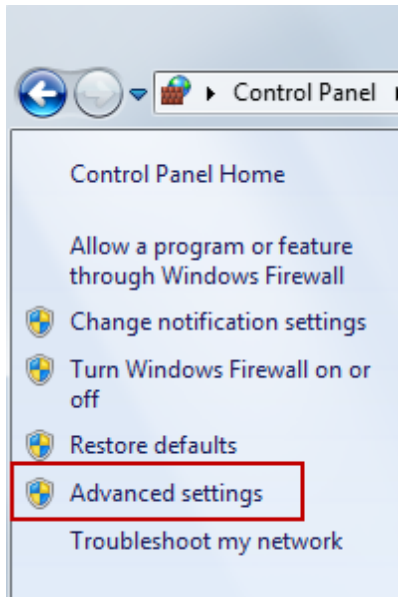
Windows 7 Firewall Configuration

1. Open Windows Firewall by opening Control Panel and then using one of two methods (depends on "View by" option used)
 - **Category View**- Select System and Security click Windows Firewall
 - **Large or Small Icon View**- click Windows Firewall

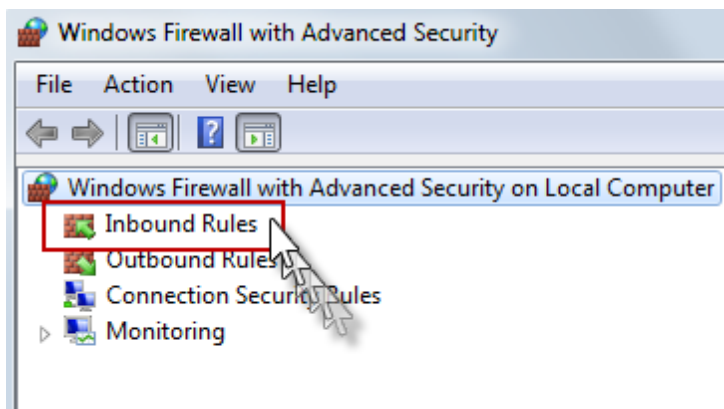
Note: You can access Windows Firewall with Advanced Setting by clicking on the Windows start icon and typing "windows Firewall in the "Search programs and files" dialog box. Search result will appear at the top of the window. Skip step 2 if using this method.



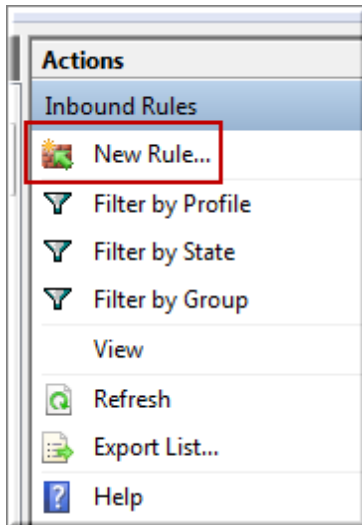
2. Click Advanced settings



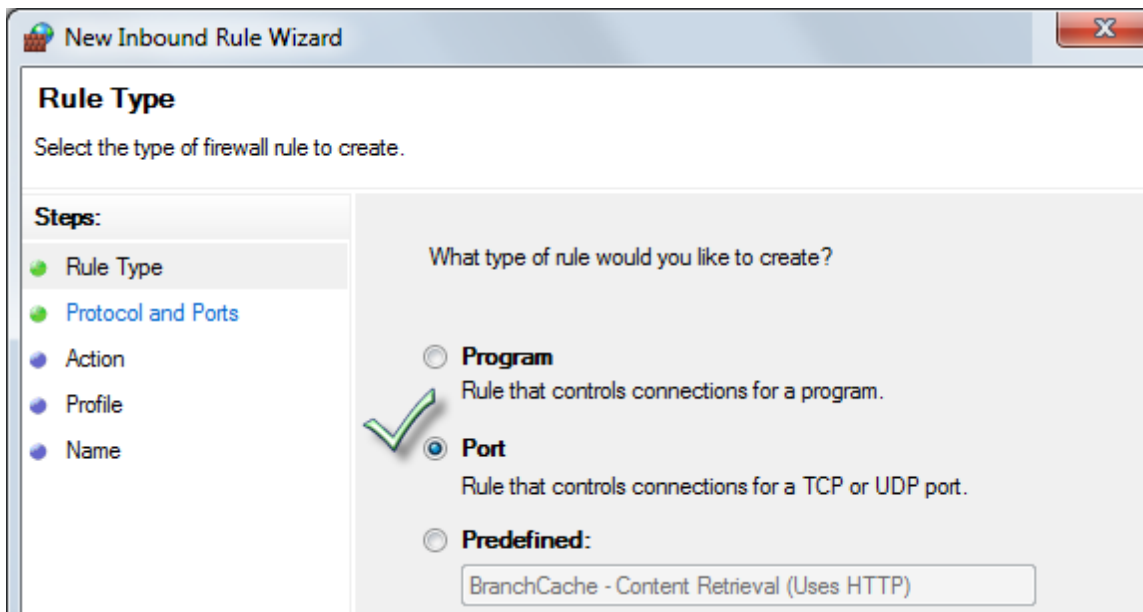
3. Click "Inbound Rules"



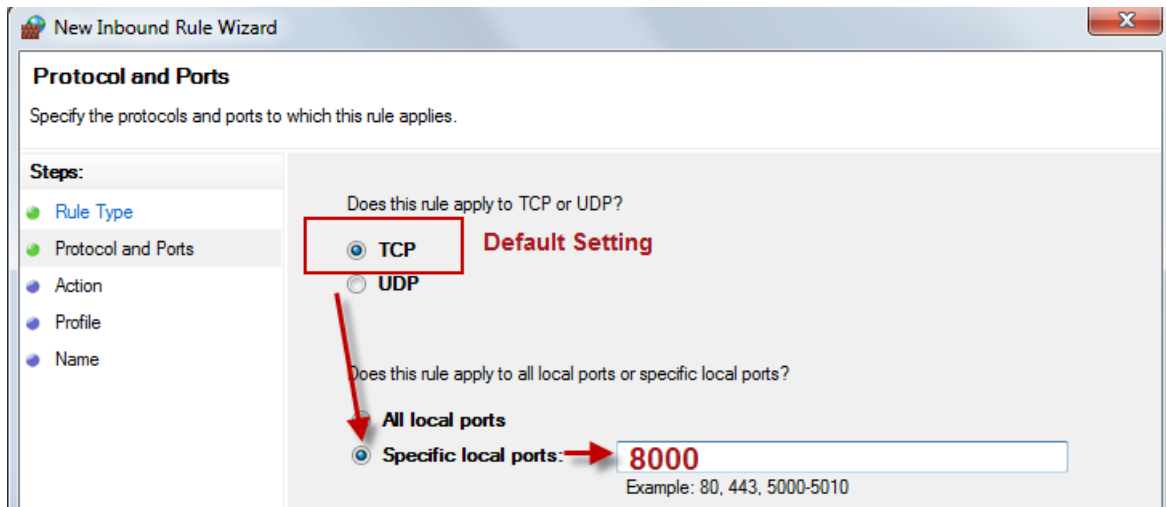
4. Select "New Rule" under the Action section of window



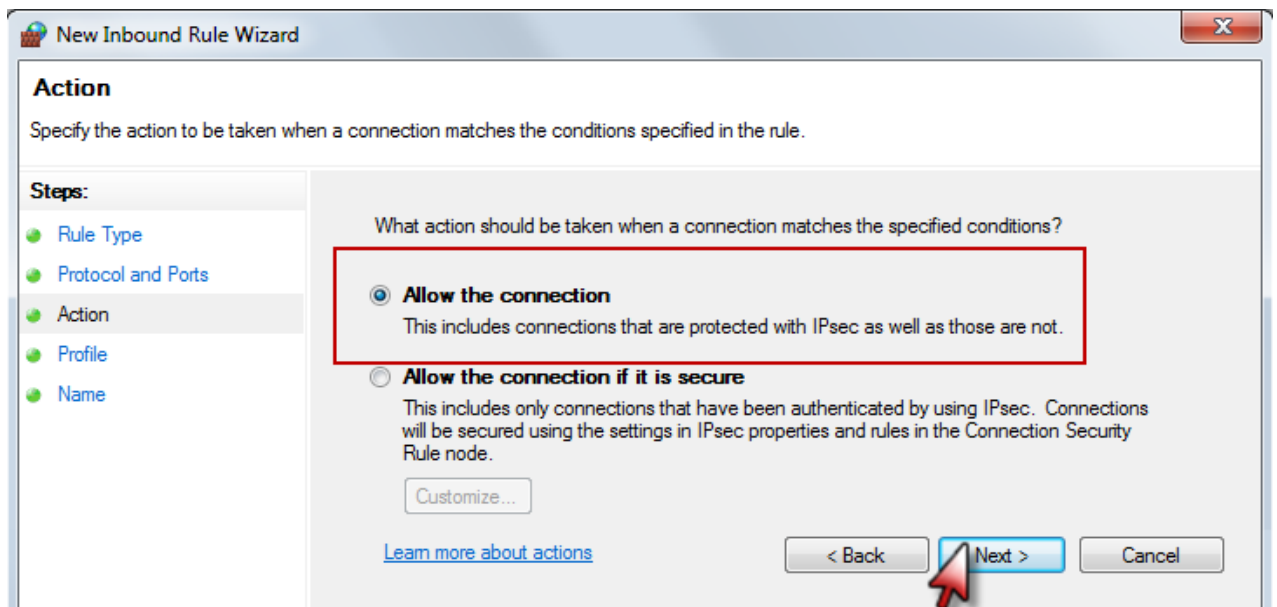
5. Select the Port option on the New Inbound Rule Wizard window and click Next



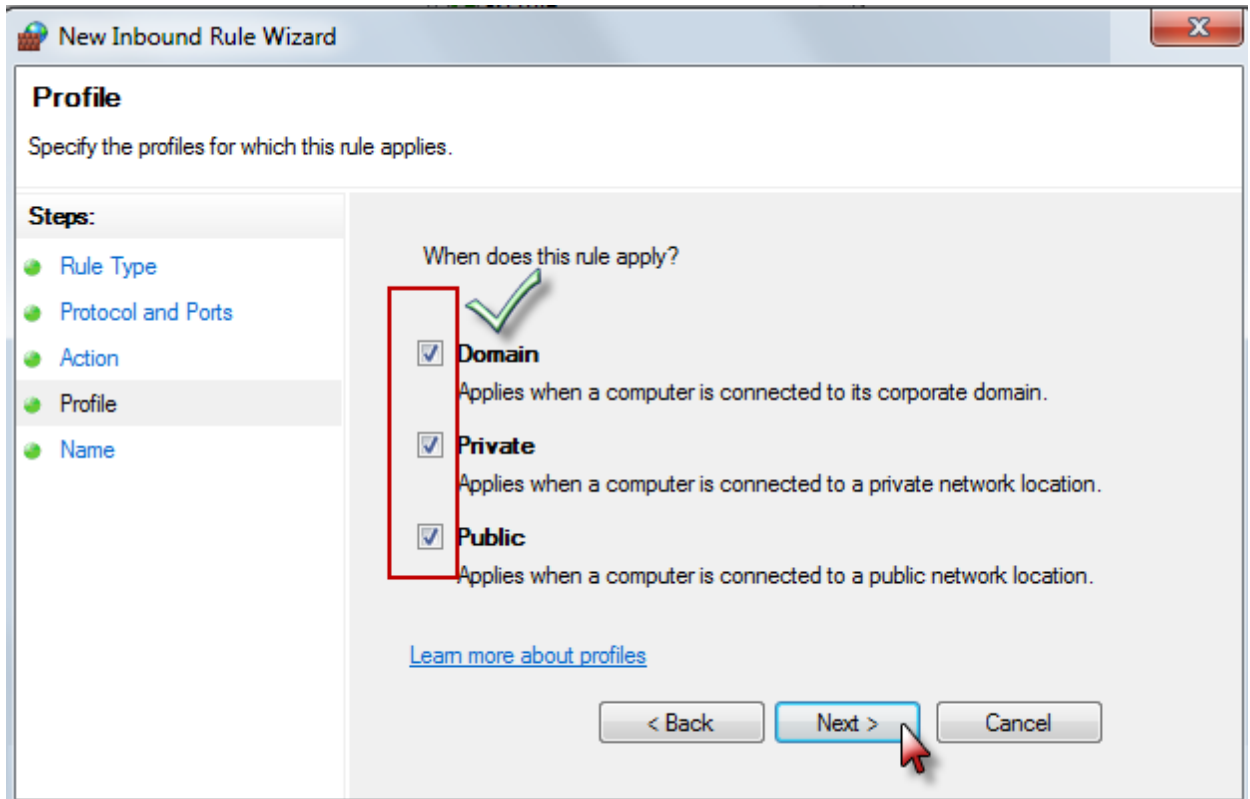
6. On the Protocol and Ports screen, use the TCP default setting. Click on the Specific local ports option and type "8000" in the dialog box to the right. Click Next to proceed.



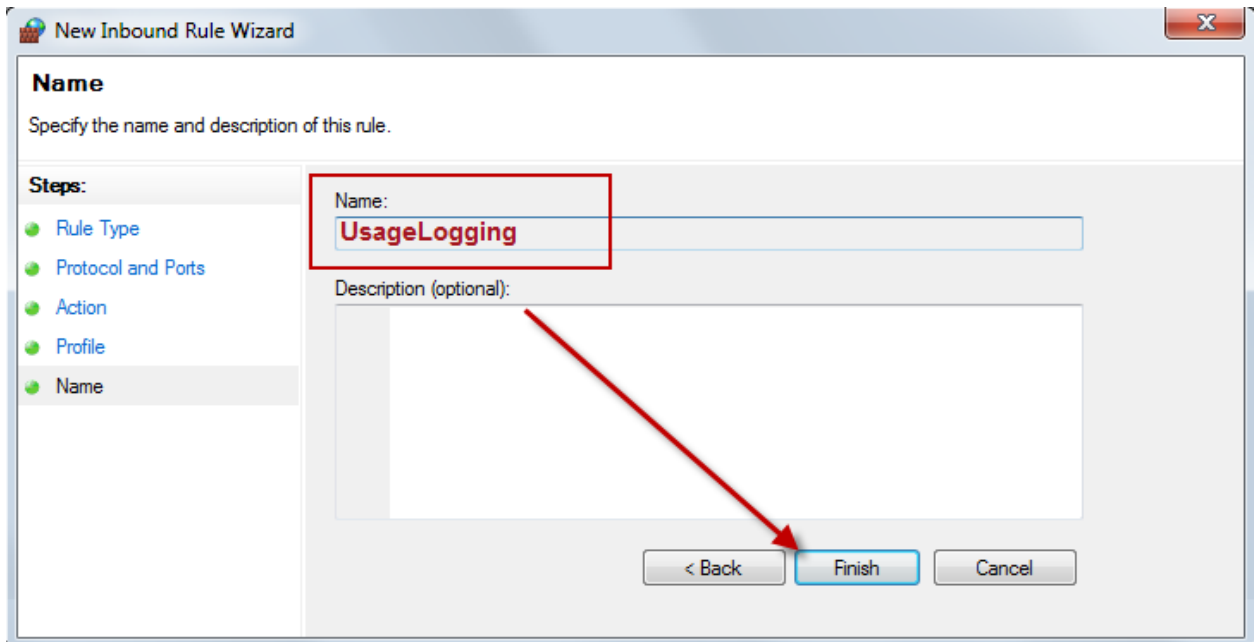
7. In the Action screen you will keep the default setting "Allow the connection". Click on Next.



Make sure all the default settings (Domain, Private, Public) are enabled in the Profile window and click Next.



8. On the Name window type "UsageLogging" in the Name field and click Finish



XP Pro Firewall Configuration

1. Open Windows Firewall by opening Control Panel and clicking the Windows Firewall icon



2. Select the Exceptions tab and click Add Port
3. In the Add Port Window:
 - type "Usagelogging" in the Name field
 - type 8000 in the Port Number field
 - verify TCP is enabled
4. Click the OK button to save changes

Appendix: About com0com

The com0com null-modem emulator is an open source kernel-mode virtual serial port driver for Windows and is available freely under GPL license. You can create an unlimited number of virtual COM port pairs and use any pair to connect one application to another. Each COM port pair provides two COM ports with default names starting at CNCA0 and CNCB0. The output to one port is the input from the other port and vice versa. Usually one port of the pair is used by a Windows application that requires a COM port to communicate with a device, and the other port is used by a device emulation program. com0com is such a program. This program is installed by the RMCCD Installation Wizard. To access it go to : Windows Start > Programs > com0com folder > Setup.

This program is installed by the RMCCD Installation Wizard. The program is accessed by clicking on Windows Start > Programs > com0com folder > Setup.

Manual Installation of com0com

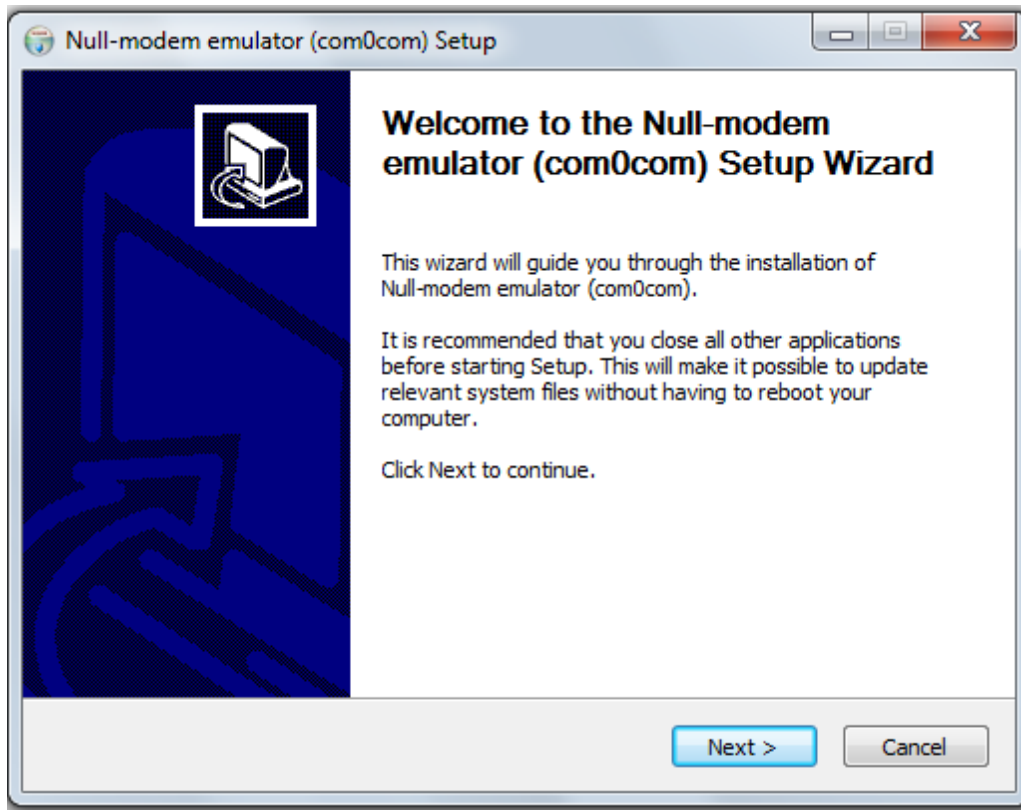
The Com0Com Null Modem emulator will be downloaded during the RMCCD Installation. You will need to locate setup executable. (Completely contradicts the statements found on page 14 of this guide pointing you to the .bat file and NOT the install.exe)

The program can also be found online and download using this link: com0com-3.0.0.0-i386-and-x64.

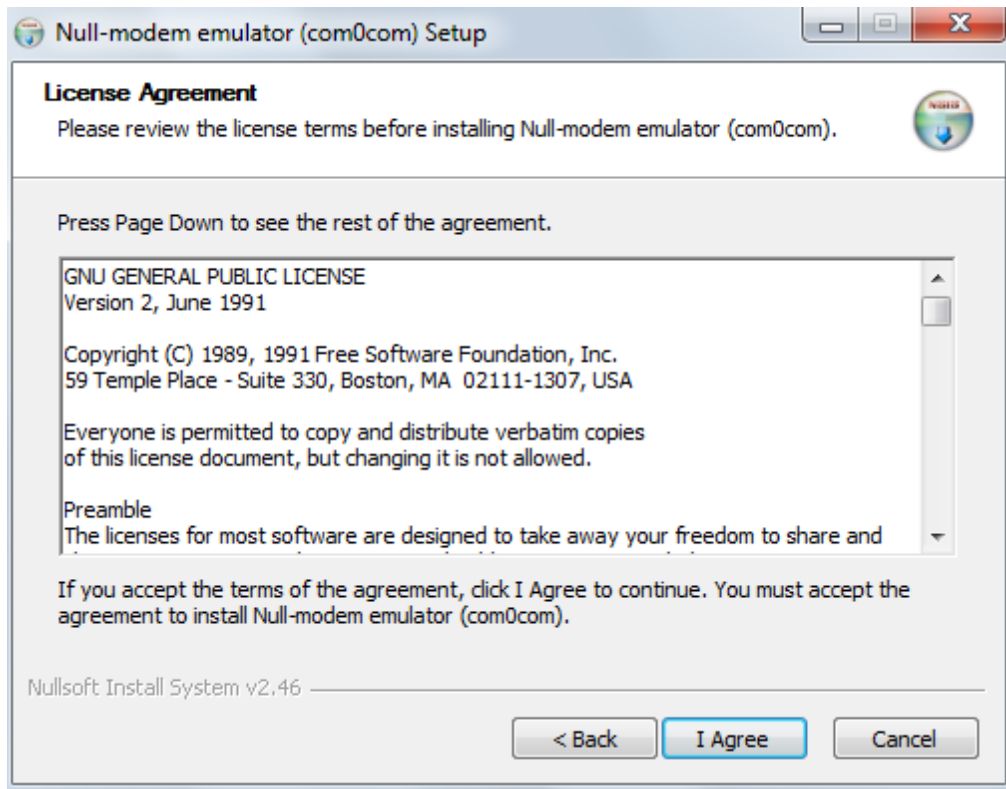
(X64 suggests that you have a 64bit OS. This hyperlink loads the zip file almost without asking and never gives you the page to be sure that if you have a 32bit OS it's ok to use it)

Use the steps outlined below to install and configure com0com:

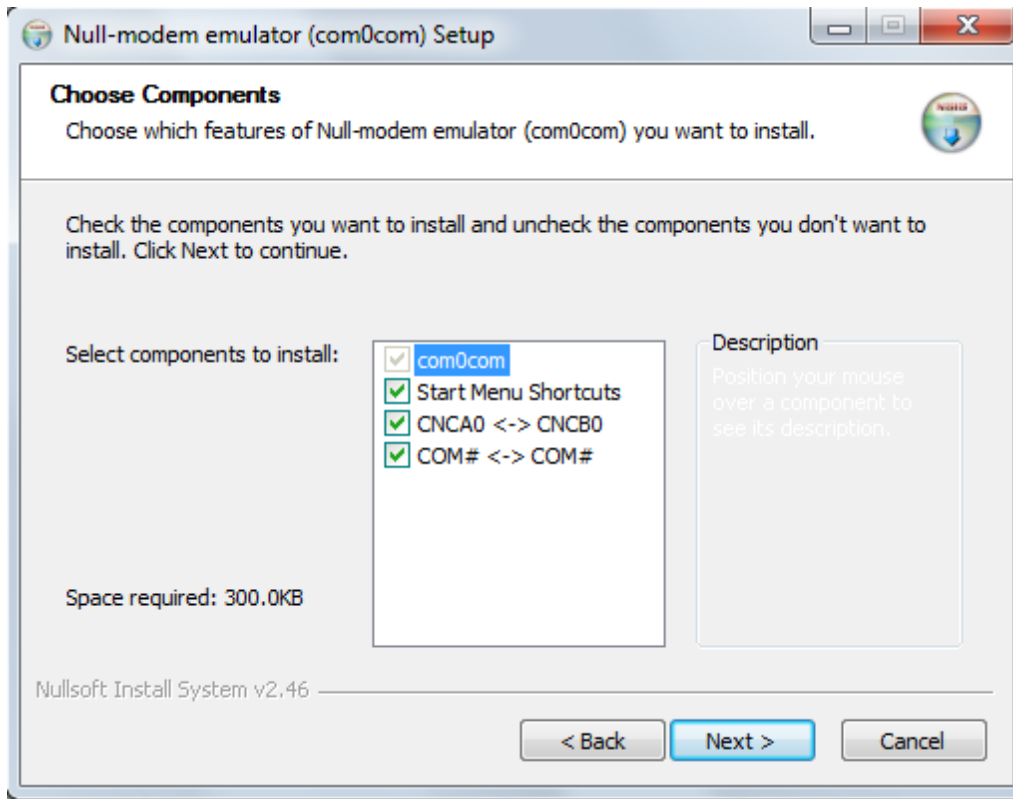
1. Click on setup.exe and click the Next button



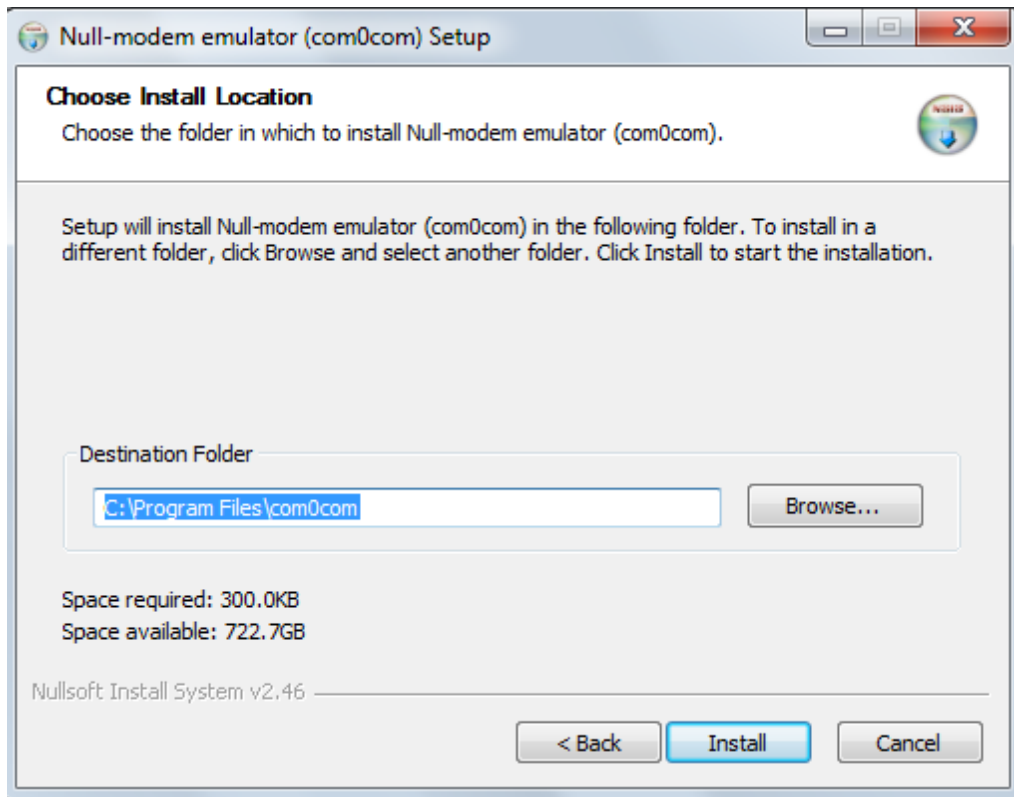
2. Read the Licence Agreement and click "I Agree" to continue.



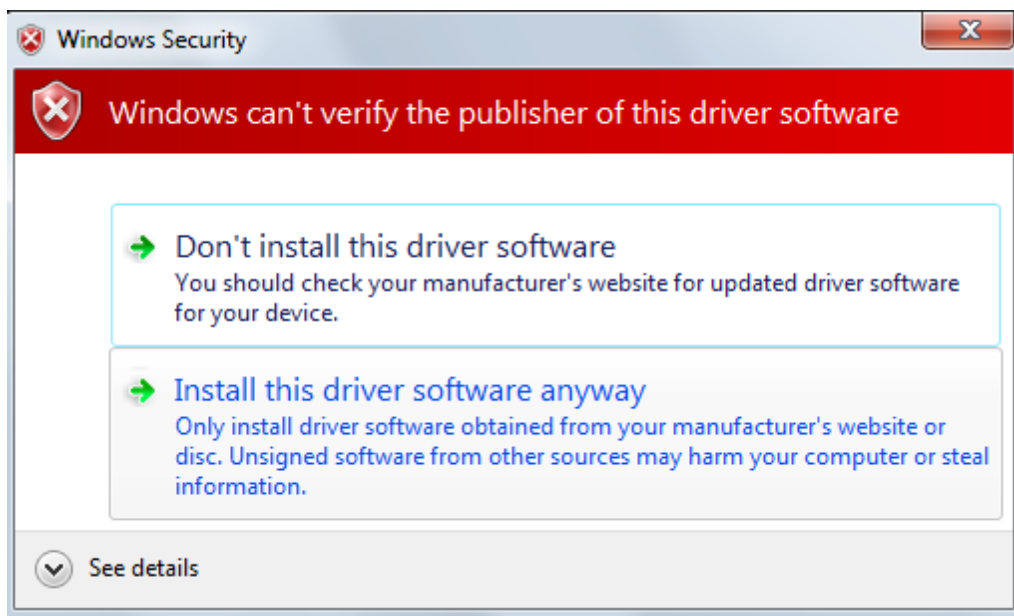
3. Enable the following options in the Choose Components window and click the Next button
 - a. Start Menu Shortcuts
 - b. CNCA0 <-> CNCB0
 - c. COM# <-> COM#



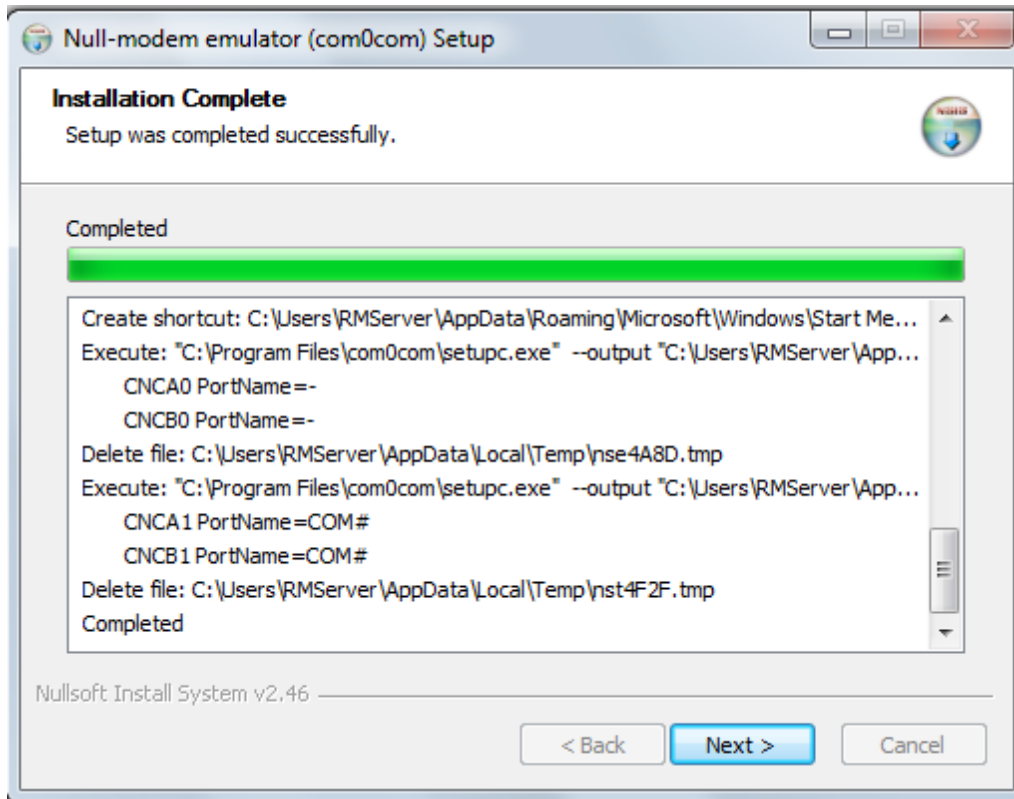
4. Either accept the default installation folder or create a new folder of your choosing and click the Install button.



5. During the installation process you will see several DOS windows and Windows Security prompts. Choose the "Install this driver software anyway" option on every Windows security prompt.

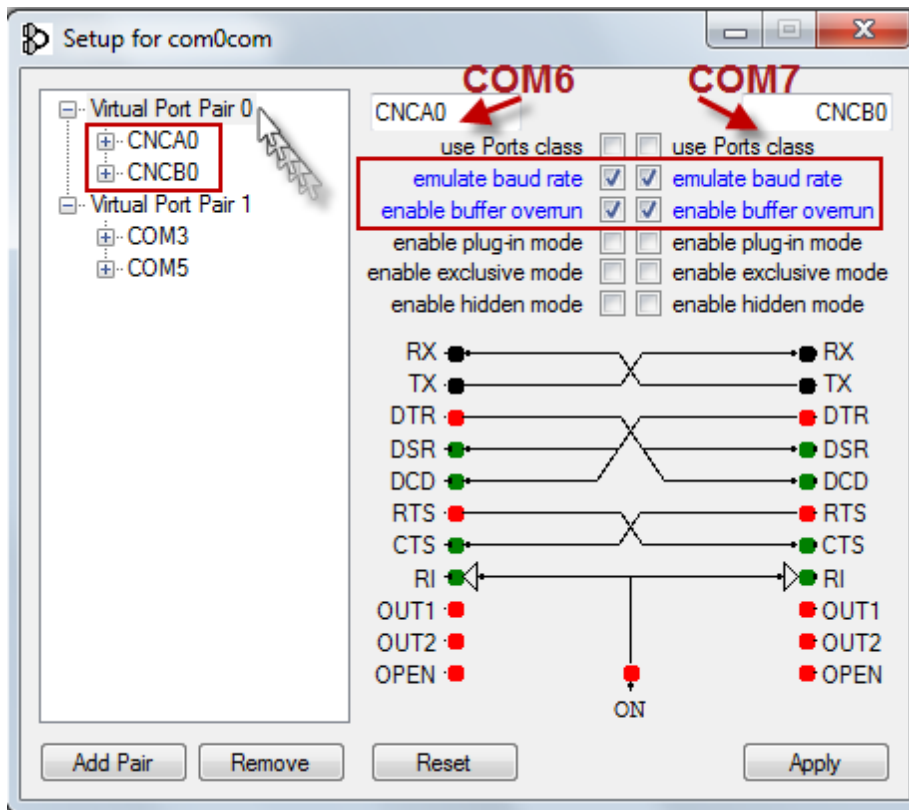


6. Click the Next button to complete the installation wizard.

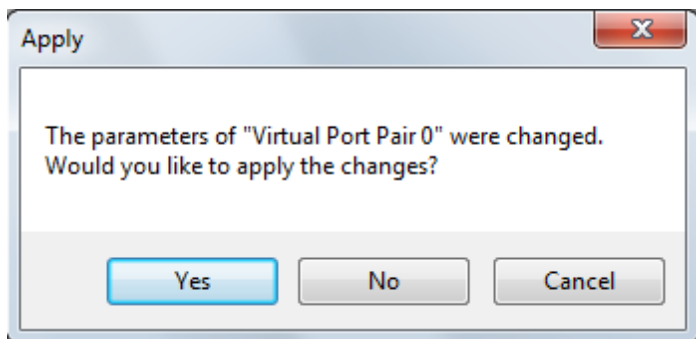


7. The rest of the setup process is conducted in the com0com setup form. The setup form is accessed by clicking on the Windows Start icon (W7) > All Programs > com0com folder > Setup.
8. Click on the Virtual Port Pair 0 menu tree heading and use the following settings:
 - Click on the CNCA0 field box (right side of form) and type "COM" followed by the port number with no space between the two (i.e. COM6)- the com setting used here must match the station pole display com setting in the RM Back-Office Station Configuration Setup form.
 - Click on the CNCB0 field box (right side of form) and type "COM" followed by the port number with no space between the two (i.e.COM7)
 - Enable the "emulate baud rate" options for both COM 6 & 7.
 - Enable the "enable buffer overrun" options or both COM 6 & 7.

Note: all other options should be disabled



9. Click the Yes button in the Apply window to save your changes

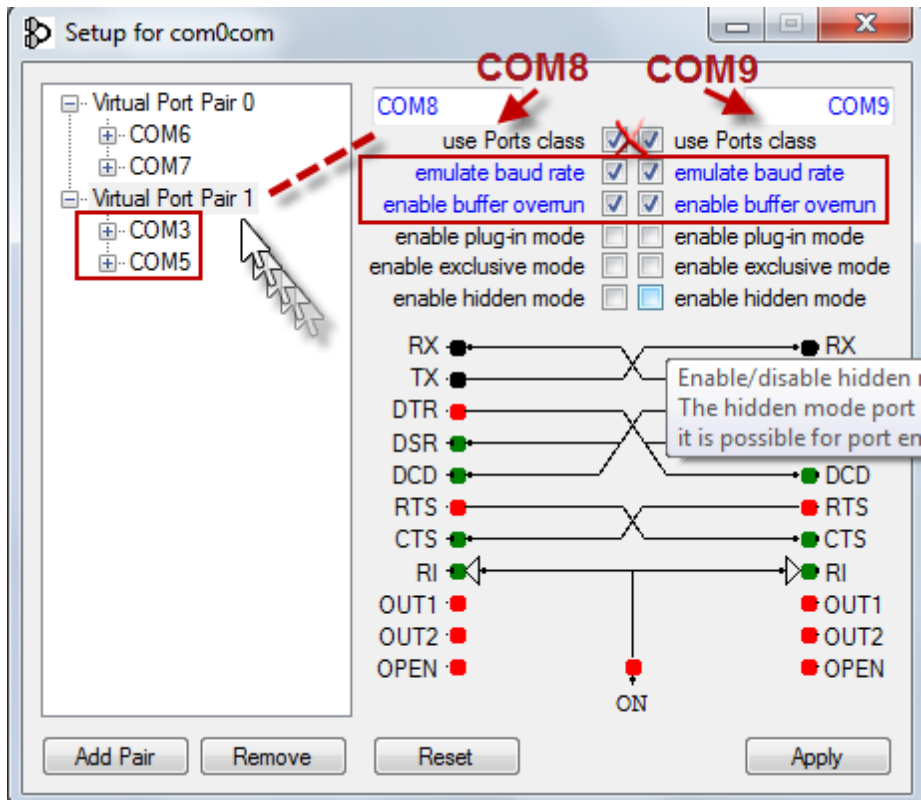


10. Click on the Virtual Port Pair 1 menu tree heading and use the following settings:

- Click on the left com field box (right side of form) and type "COM" followed by the port number with no space between the two (i.e. COM8) - this setting should match the station com setting in the OCDSpooler Setup(exe).
- Click on the right com field box (right side of form) and type "COM" followed by the port number with no space between the two (i.e. COM9).
- Enable the "emulate baud rate" options for both COM settings (i.e com 8 & 9).
- Enable the "enable buffer overrun" options or both COM settings (i.e com 8 & 9).

9).

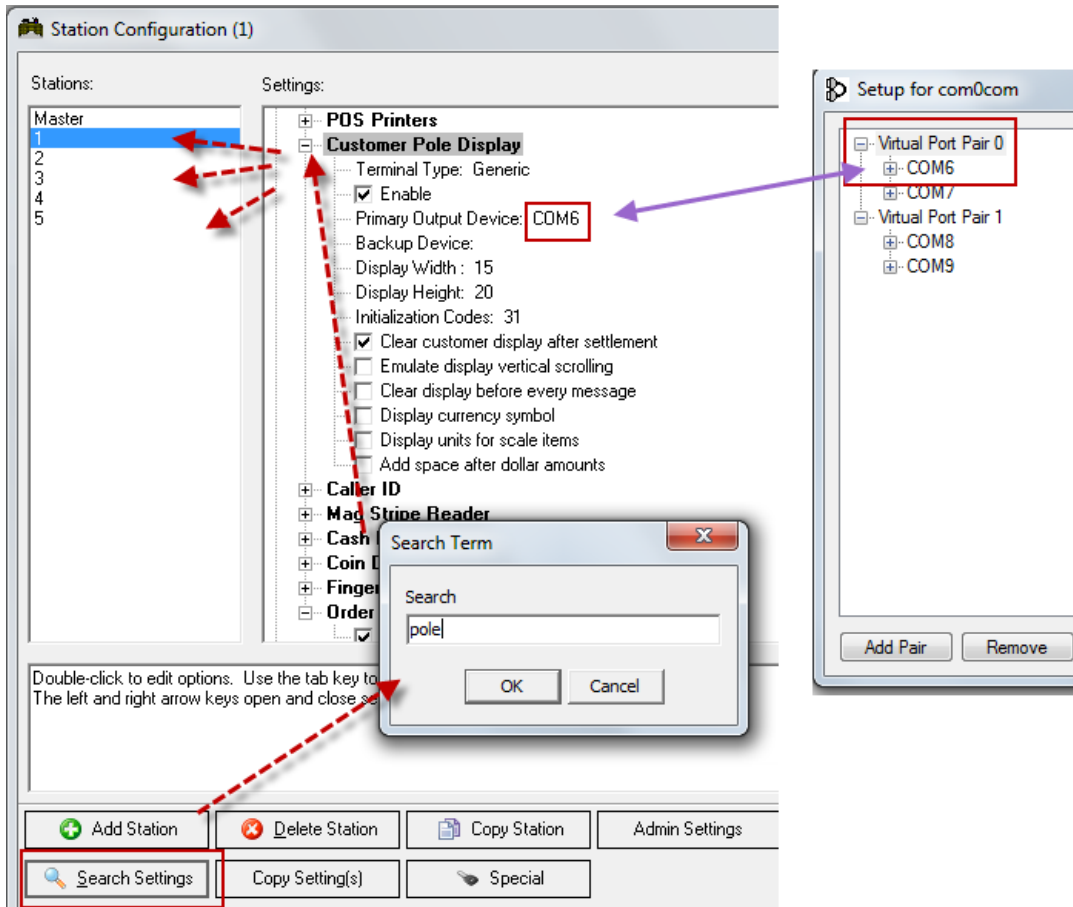
Note: all other options should be disabled



Changing com0com Settings

There may be an occasion where you need manually change the com settings in com0com program (i.e. adding a com port PCI serial card). Use steps [7 through 10](#) from the previous section to changes settings. Keep the following rules in mind when changing settings:

1. The first COM setting under the Virtual Port Pair 0 setting (i.e. COM 0) must match the station pole display com setting in the RM BackOffice Station Configuration Setup form.



2. The first COM setting under the Virtual Port Pair 1 setting (i.e. COM 8) must match the station com setting in the OCDSpooler Setup(exe)

