



PULSE

Creating a Network for LAN Enabled Embroidery Machines

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Networking a Tajima TFMX Quick Reference
Embroidery Machine Firmware 1.10 or Later

Connections	With the power to the embroidery machine off, connect the embroidery machine to an available network jack, router or network hub using standard computer Ethernet cables. The embroidery machine is connected to your network as if it was a computer. Networking the machines requires a DHCP server. DHCP servers are common in many corporate networks. Also, most routers will have DHCP servers built in.
Installing Software	During the installation of Tajima DG/ML by Pulse, select Yes to the Embroidery Machine Connection dialog. This will install Design Spooler. When connecting to LAN machines only, Design Spooler needs to be installed on a single computer. Other Tajima DG/ML by Pulse computers on your network will not need Design Spooler installed unless they are connecting to Serial or Parallel embroidery machines. Restart Windows® with the security device attached after installation. Design Spooler will start automatically when Windows® starts.
Firewall	If you are using a firewall, make sure that the Design Spooler application is allowed to access the network.
Configuring Software	Select Tools—Configuration—Spooler Settings. Change the LAN Machine Support setting to Enabled.
Configuring Machine	Turn on the embroidery machine. After the machine is powered up, press the SET and F3 keys at the same time. Scroll down using the arrow keys to the Network option. Change the setting from No to Yes by rotating the jog dial and press the SET key.
Sending Designs	Start Tajima DG/ML by Pulse. Open one or more embroidery designs. Select File—Output to Machine. Select the embroidery machines from the list and press the Send button.

Creating a Network for LAN Enabled Embroidery Machines

This guide outlines how to set up a basic network for connecting your Tajima LAN enabled embroidery machines and outlines some of the features of Design Spooler. Please see your Tajima DG/ML by Pulse User's guide or Online Help for additional details of Design Spooler. Tajima LAN enabled embroidery machines can connect to a standard computer network using DHCP. Please consult your System Administrator or computer professional if you need assistance configuring your existing network.

Hardware Required

Below is a list of the components required to set up a basic network for your LAN enabled embroidery machines.

Wireless Router

The Wireless Router is used to establish a wireless or wired network. The Wireless Router has a number of components that allow you to quickly set up a network even if you do not plan to use it wirelessly. This device is available from your local computer store. We strongly recommend the model listed below as this device has been tested for use with the Tajima DG/ML by Pulse software. These instructions assume that you are using this type of Wireless Router.

Manufacturer: Linksys
Model: WRT54G

This device has a number of features essential for setting up a basic network including:

- Built-in DHCP server. A DHCP server assigns addresses to each device connected to your network. This eliminates the need to have a dedicated server computer to control your network.
- 4 port full-duplex 10/100 switch. Connect up to 4 computers or embroidery machines using an Ethernet cable. Connect network hubs or switches to obtain additional connections.
- Network Router allows you to share your high speed internet connection with all of the computers on your network.

Network Cards

Tajima DG/ML by Pulse workstations that will be connected to the network will require a network card. This card could be a wired or wireless network card. The router is capable of working with wired or wireless networks.

Ethernet Cables

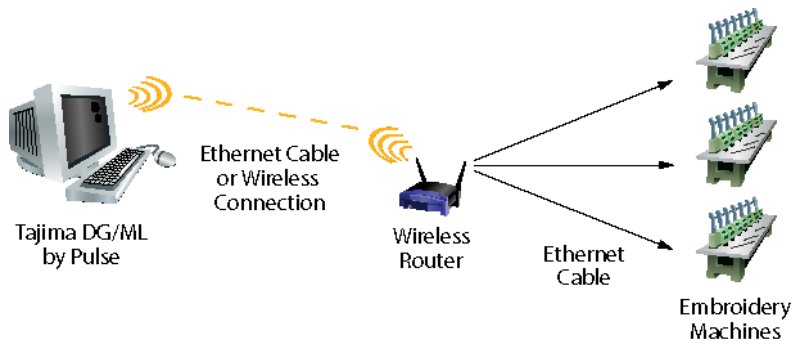
Standard computer networking cable (CAT 5 cable) can be used to connect LAN enabled embroidery machines and computers to the Router. This cable is available from your local computer store. The Linksys router that is recommended comes with 4 LAN ports to connect computers or embroidery machines. A network hub or switch can be used to add additional ports. Wireless network cards can be used instead of Ethernet cable for the computers in the network. LAN enabled embroidery machines could also be connected wirelessly using an optional Wireless LAN adaptor.

Network Overview

A separate application known as a Design Spooler controls the communication between Tajima DG/ML by Pulse workstations on your network and LAN enabled embroidery machines. The Tajima DG/ML by Pulse installation will automatically install Design Spooler when the user selects that they will be connecting to an embroidery machine through cable.

When configuring Design Spooler for LAN enabled machines, you need to select one computer on your network to be the LAN Design Spooler. All of your LAN enabled embroidery machines as well as any Tajima DG/ML by Pulse workstations on your network will exchange information through this computer. You can select which computer will be the LAN Design Spooler from within the Tajima DG/ML by Pulse software. Additional information on configuring Design Spooler will be discussed later in this guide.

The Router is used to establish the communication between the different components of the network. Design information is sent from the Tajima DG/ML by Pulse workstations to the Design Spooler and from the Design Spooler to the embroidery machines through the Router. The Tajima DG/ML by Pulse workstations and LAN enabled embroidery machines must be connected to the Router either using Ethernet cables or wirelessly.



Connecting Hardware Components

Positioning the Wireless Router

The best place to position the wireless router is usually at the center of your wireless network with line of sight to all wireless components of your network.

Connecting the Wireless Router

Connect the LAN enabled embroidery machines and computers using standard Ethernet cables to the numbered jacks on the wireless router. Wireless network cards could also be used instead of Ethernet cables for the connection from the computer to the wireless router.



Tajima machines can coexist on your business network. If you wish to connect your business network to the Internet, connect an Ethernet cable to the port labeled Internet on the Wireless Router. Connect the other end of the Ethernet cable to your Cable or DSL Broadband Modem.

Note: Tajima machines can be accessed from your internal network only and can not be accessed from the internet.

Connect the AC Power Adaptor to the Wireless Router's power connector and the other end to an electrical outlet. Make sure the power adaptor that is supplied with the

Wireless Router is the appropriate voltage for the country for which it is being used. It is recommended to purchase the Wireless Router in the country where it will be used to ensure that the proper power adaptor is supplied. Connecting the incorrect power adaptor could result in damage to the Wireless Router.

Connecting LAN Enabled Embroidery Machines and Computers

Make sure that the embroidery machines and computers are powered off before making any connections. Connect the Ethernet cables from the Wireless Router to the LAN enabled embroidery machines and computers. Wireless network cards can be used to connect computers to your network without Ethernet cables for the computer. The connection for the Ethernet cable is on the back of or inside the operation panel of LAN enabled embroidery machines.

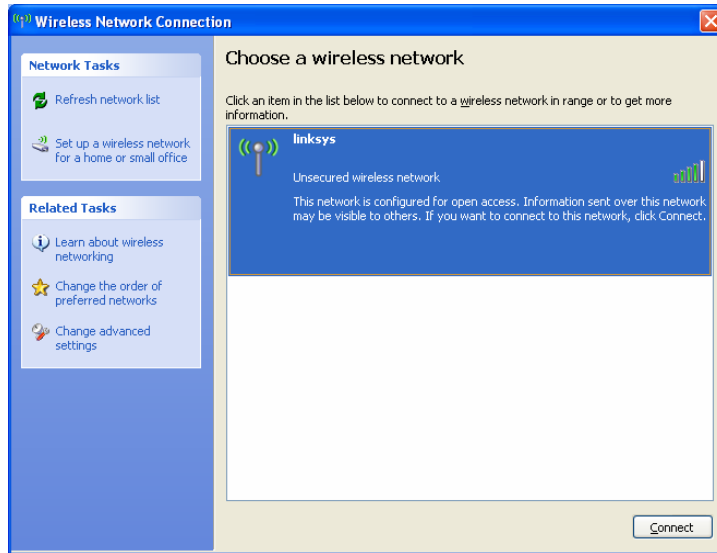
Configuring Your Computer

The Wireless Router should work right out of the box using the default configuration. You will need to make sure that the network card is properly installed and configured for your computer. Many new computer systems come with wired and/or wireless network cards already installed and configured. If you have purchased a network card to install into your computer, refer to the documentation supplied with the network card for installation instructions.

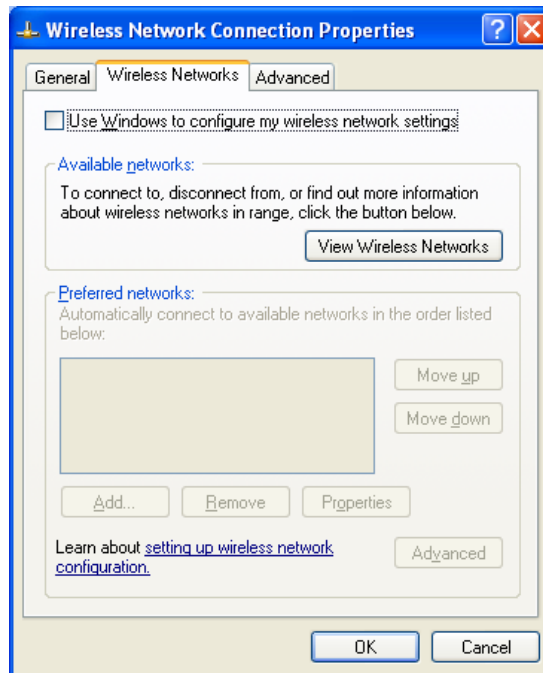
Using a Wireless Network Card

If your computer has a wireless network card installed from the manufacturer, it should be configured for use with your wireless network. If you are adding a wireless network card, see the installation instructions that came with your network card for installation instructions. If you are using a notebook computer, you may need to turn on the wireless network using a switch or key combination on the computer. See your computer's user's manual for more information. Once your network card has been configured, follow the procedure below to access the Wireless Router. The instructions below are for Windows® XP SP2 using the classic interface (in which icons and menus look like previous Windows versions). Instructions for other operating systems may be slightly different.

1. Make sure the Wireless Router is turned on.
2. Click the Start button and select Settings—Control Panel. Double-click the Network and Dialup Connections icon.
3. Double-click the Wireless Network Connection icon.
4. Click the View Wireless Connections button. You should see a screen similar to the one below:



If a message “Windows can not configure this wireless connection” is displayed, click the Change Advanced Settings icon and select the Wireless Networks tab. A dialog similar to the one below is displayed.

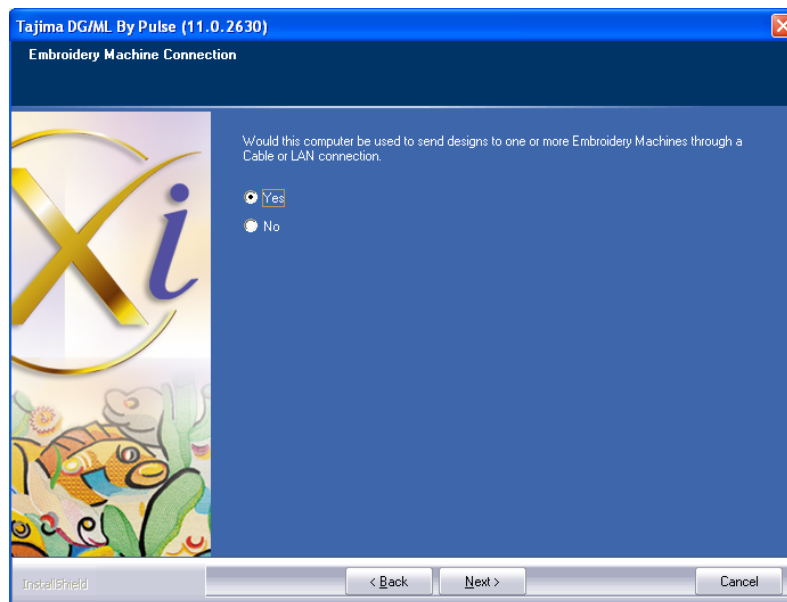


Check the box labeled “Use Windows to configure my wireless network settings” and click OK. You should then see linksys on your list of available networks.

5. Select linksys from the list of available networks and click the Connect button.
6. You will receive a warning that you are connecting to an unsecured network. Click the Connect Anyway button.
7. You are now connected to your wireless network and you can close the Wireless Network Connection dialog box.

Installing Design Spooler

During the installation process of Tajima DG/ML by Pulse, you will see the dialog box below.



If you will be using this computer to connect to LAN enabled embroidery machines, select Yes from the list and click Next to continue. This will install Design Spooler on your computer. If you are only connecting to LAN enabled embroidery machines, you only need to install Design Spooler on one of the computers in your network. Any other Tajima DG/ML by Pulse workstations will connect to the Design Spooler computer to communicate with the machines.

You should restart your computer after installing Tajima DG/ML by Pulse to allow Design Spooler to start automatically or you can also manually start Design Spooler. See below for more information.

Note: You must have administrator rights on your local computer to install Tajima DG/ML by Pulse and Design Spooler.

If you are using a firewall on your computer you must allow the Design Spooler application access to your network. If you are using Windows® XP Service Pack 2, Windows Firewall is active by default. When Design Spooler is started for the first time, you will see a message asking if you wish to allow the Design Spooler application similar to the one below:



You allow this application by selecting Unblock in order for Design Spooler to function.

Running Design Spooler

The Design Spooler is a Windows® service that runs in the background and will start automatically when the computer is restarted. If you wish to manually start or stop Design Spooler, you can do so by selecting Start—All Programs—Tajima—DGML by Pulse—Start Design Spooler or Start—All Programs—Tajima—DGML by Pulse—Stop Design Spooler. You will see a black window which will disappear after a few seconds. Your security device needs to be attached before running Design Spooler. If your security device was not attached when your computer was restarted, you can connect the device and try to start the Design Spooler again.

LAN Machine Licenses

In order to use Tajima DG/ML by Pulse with your LAN enabled embroidery machines, you must obtain a license for each machine. Contact your distributor for more information on LAN machine licenses. When adding additional machine licenses you will be provided with a security device update file from your distributor. This file will update the security device that is connected to the computer running the Design Spooler software allowing access to the LAN enabled embroidery machines. When contacting your distributor to request LAN machine license, please let them know the device number for the computer that you have designated as the Design Spooler for LAN enabled machines.

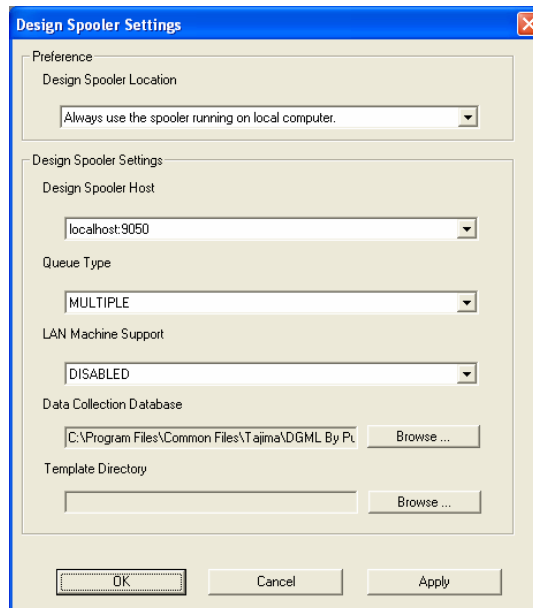
Using Design Spooler with Tajima DG/ML by Pulse

Once the Design Spooler has been installed and started, any Tajima DG/ML by Pulse workstation on your network will be able to communicate with the Tajima LAN enabled embroidery machines by connecting to the Design Spooler. Once connected, you will be able to send designs, view the status of sewing and manage the pool of designs that are available to your LAN enabled machines.

Design Spooler Settings in Tajima DG/ML by Pulse

After the Tajima DG/ML by Pulse software and Design Spooler have been installed, Design Spooler needs to be enabled for LAN embroidery machines. This is done from within the Tajima DG/ML by Pulse software. Follow the steps below to enable LAN embroidery machine support.

1. Start Tajima DG/ML by Pulse.
2. Select Tools—Configuration—Spooler Settings. The Design Spooler Setting dialog box will be displayed.



Below is an explanation of the settings in the Design Spooler Settings dialog:

Design Spooler Location

The Design Spooler Location setting has two values:

Always use the spooler running on local computer— Use this setting if Tajima DG/ML by Pulse is installed on the same computer as Design Spooler. If you have only a single Tajima DG/ML by Pulse computer, this is the normal setting.

Locate all spoolers on the network— If there are more than one Tajima DG/ML by Pulse computers on your network and you wish to communicate with Design Spoolers located on different machines, use this setting. If this value is selected, Tajima DG/ML by Pulse will search for all Design Spoolers running on your network. If no Design Spooler is found, an error message will be displayed. See the troubleshooting section for more information.

Design Spooler Host

If the Design Spooler Location is set to “Locate all spoolers on the network”, The Design Spooler Host setting will list all of the Design Spoolers found by the software. You can select from the list the Design Spooler that you wish to configure. If the Design Spooler Location setting is set to “Always use the spooler running on local computer” then there will be only one entry in this list.

Queue Type

The Queue Type setting has two values:

Single— All embroidery machines on your network share the same pool of designs. Once a design is sent, it is available to all of the machines on your network. The Single Queue type is available only if all embroidery machines on our network are either LAN enabled machines or Neo (TEJT) embroidery machines using TBF Bi-Directional Machine Protocol. These machines allow the operator to select a design from the operation panel of the machine. This option will not be available if Design Spooler is configured with any other embroidery machine type.

Multiple— Each embroidery machine has its own queue of designs. You can send designs to selected embroidery machines and manage the list of designs independently.

LAN Machine Support

The LAN Machine Support setting allows you to indicate that the selected Design Spooler will be used to connect to LAN enabled Tajima embroidery machines. ***In order to use LAN enabled machines, one computer must be designated as the LAN enabled Design Spooler.***

If you are unable to change the setting to enable LAN machine support, you may have another computer on your network running Design Spooler where LAN machine support is already enabled.

Data Collection Database

The Data Collection Database setting indicates the path of database files used for data collection from the embroidery machines. This is usually set to C:\Program Files\Common Files\Tajima\DGML by Pulse\ReportDB

Template Directory

Template Directory indicates the path containing text template files. These templates are used by Smart LCD (PDA based Pulse software). You must own Smart LCD software to use this feature. This setting can only be changed for the local spooler.

Enabling Networking on Tajima TFMX Embroidery Machines

LAN connectivity is supported in TFMX machines starting with firmware version 1.10. The firmware version number is displayed when the machine is started. Contact your distributor to obtain the latest version of the machine firmware if you have a TFMX machine with a firmware version less than 1.10.

To enable LAN support on a TFMX machine, follow the steps below:

1. Make sure your embroidery machine is powered off before connecting any cables.
2. Connect your embroidery machine to your network using standard network cable. You can connect your machines to a hub or router as you would a computer.
3. Make sure that Design Spooler is started on your Tajima DG/ML by Pulse computer and that the LAN machine support is enabled in Tools—Configuration—Spooler Settings. Design Spooler is usually started automatically when Windows® starts. You can also start Design Spooler by selecting Start—Programs—Tajima—DG/ML by Pulse—Start Design Spooler.
4. Turn on the embroidery machine.
5. After the machine is powered up, press the SET and F3 keys at the same time.

6. Scroll down using the arrow keys to the Network option. Change the setting from No to Yes by rotating the jog dial and press the SET key.

Note: If the Network setting changes back to No after a few seconds, the machine is unable to locate the Design Spooler. Make sure the Design Spooler is running and try again. See the troubleshooting section for more information.

Enabling Networking on Tajima TFGN Embroidery Machines

There are two different types of LCD operation panels on TFGN embroidery machines. Older TFGN models are Windows® CE based and do not have a LAN network jack. These machines can only communicate through the serial port.

Newer TFGN models are Linux based and do support LAN connection. These machines have a LAN network jack on the board in the operation panel. LAN support is available in the following firmware versions:

CPU: Version 4.00C or later.
Panel: Version 5.00L or later.

Contact your distributor if you require a newer version of firmware for your embroidery machine. Your distributor should also have additional information on enabling LAN networking and downloading designs to these machines.

Enabling Networking on Tajima TFKN Embroidery Machines

LAN support is available for TFKN embroidery machines in the following firmware versions:

CPU: Version 2.00C or later.
Panel: Version 5.00L or later.

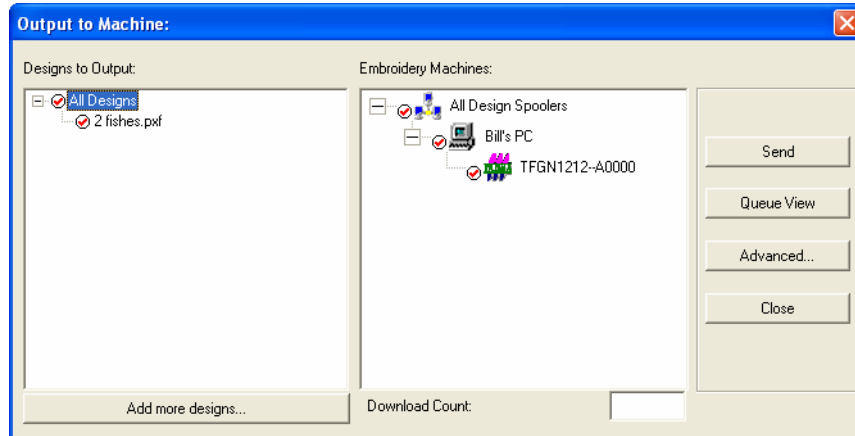
Contact your distributor if you require a newer version of firmware for your embroidery machine. Your distributor should also have additional information on enabling LAN networking and downloading designs to these machines.

Publishing Designs to a Design Spooler


The way designs are sent to Tajima LAN enabled embroidery machines is different than traditional machines. Instead of designs being sent to the machine one at a time, a number of designs can be made available to specific LAN enabled machines or all of the LAN enabled embroidery machines on your network. The process of making designs available to machines is called Publishing. Operators at the embroidery machines can select from a list of designs that have been published.

After the Design Spooler has been started and configured for LAN machine support, you can publish a design or a set of designs. Follow the steps below to make designs available to your LAN enabled embroidery machines.

1. Open one or multiple designs in Tajima DG/ML by Pulse.
2. Select File—Output to Machine. You will see the following.




3. Make sure the designs that you would like to publish to your machines are selected in the left hand side of the dialog and the machines that you would like to publish the designs are selected in the right hand side of the dialog.
4. Click Send to publish the design. You will see a confirmation or an error message depending upon whether a design was published successfully.

Notes: In addition to selecting File—Output to Machine, you can also output a design by selecting the Output to Machine icon . The Output to Machine icon behaves differently than selecting File—Output to Machine. The icon is meant to be a quick way to send the current design to a machine. If only one machine is configured, selecting the icon will send the design in the current window to the machine without displaying the Output to Machine dialog. File—Output to Machine will always display the Output to Machine dialog.

You can not publish a design that has the same name as a design that is already in the design queue for a selected machine. An error message will be displayed if you try to publish a design that already exists in the queue. If you wish to send a new design with the same name, you must delete the existing design first. See below for more information.

Design Queue

When you send a design to LAN enabled embroidery machines, the design is sent to a design queue. You can view the queue of designs from the operation panel of LAN enabled machines. A single design queue can be used for all LAN enabled machines or separate queues can be used allowing for a separate set of designs for each machine. The Queue Type setting in Tools—Configuration—Spooler Settings allows you to select the type of queue you would like to use.

The Design Queue Manager within Tajima DG/ML by Pulse allows you to manage your queue of designs, including the ability to delete and reorder designs in a queue. You can open the Design Queue Manager by selecting File—Design Queue, selecting the Design Queue icon , or by selecting Queue View from the Output to Machine dialog.

The Design Queue Manager displays the queue for each machine. You can reorder the designs in the queue by clicking on the icon of the design and dragging. This will change the order that the designs are displayed on the embroidery machine. Right clicking on a design displays a menu with the following options:

Delete

Deletes the selected design from the design queue.

Set as First

Moves the selected design to the first position in the design queue.

Set as Last

Moves the selected design to the last position in the design queue.

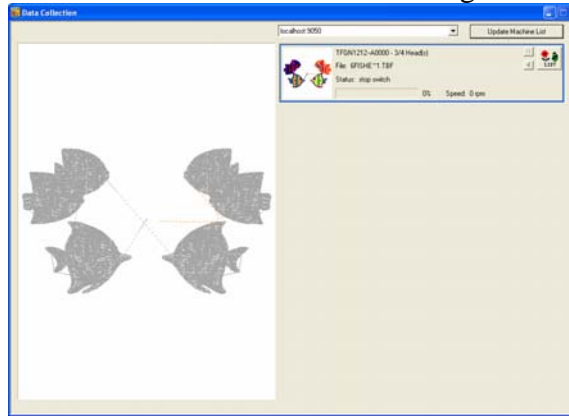
Note:

Deleting the currently sewing design from the queue will make the design unavailable to Machine Status and Data Collection. You will not be able to see the icon of the design in Machine Status if you delete the design that is currently sewing from the design queue.

Viewing the Machine Status for LAN Enabled Machines

Machine Status allows you to view the status of your embroidery machines on your network in real time. You are able to view the current sewing design as well as other information regarding the state of the embroidery machines on your network. Follow the steps below to view the status of your machines.

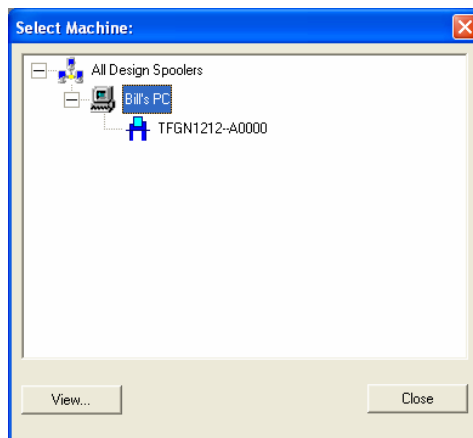
Select File—Machine Status. You should see the following:



If all your machines are not on the list then click on “Update Machine List” in order to update the list of available machines.

Viewing Reports

You can View Reports on the production of your embroidery machines by selecting Tools—View Reports from within Tajima DG/ML by Pulse. After selecting View Reports, you will see the dialog similar to the one below:



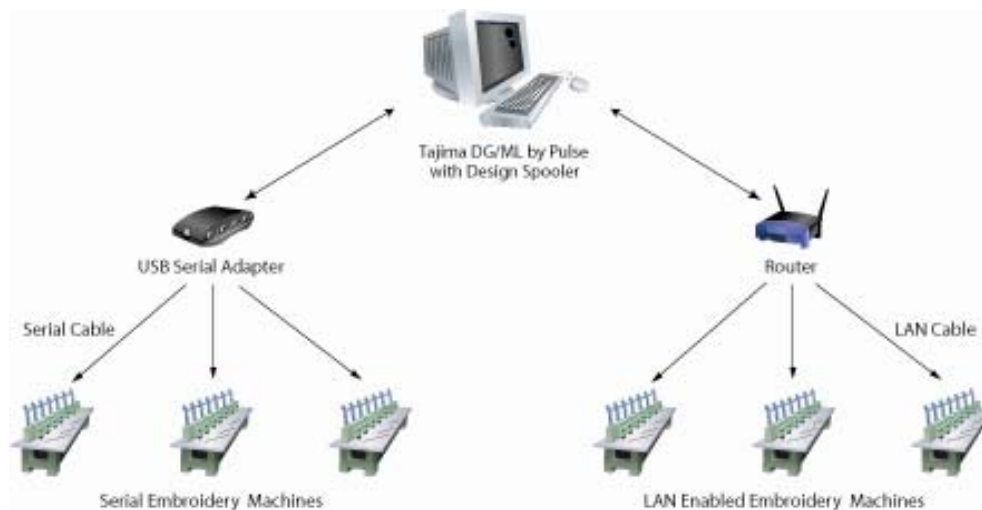
Select the name of the Design Spooler or Machine that you would like to view. You can then select the report type and date range for the selected report. For more information on the reporting features, please see the Tajima DG/ML by Pulse User's Guide or Online Help.

Connecting LAN and Non-LAN Embroidery Machines

In Edition Xi and later versions, Design Spooler is used to control both LAN and Non-LAN based embroidery machines. One of the advantages of this approach is that you output designs to both LAN and Non-LAN machines in a similar way. Embroidery shops that have a mixture of newer LAN enabled Tajima models together with older models that communicate with serial cables will find that the procedure for outputting and managing designs is very similar no matter what machine type they are using.

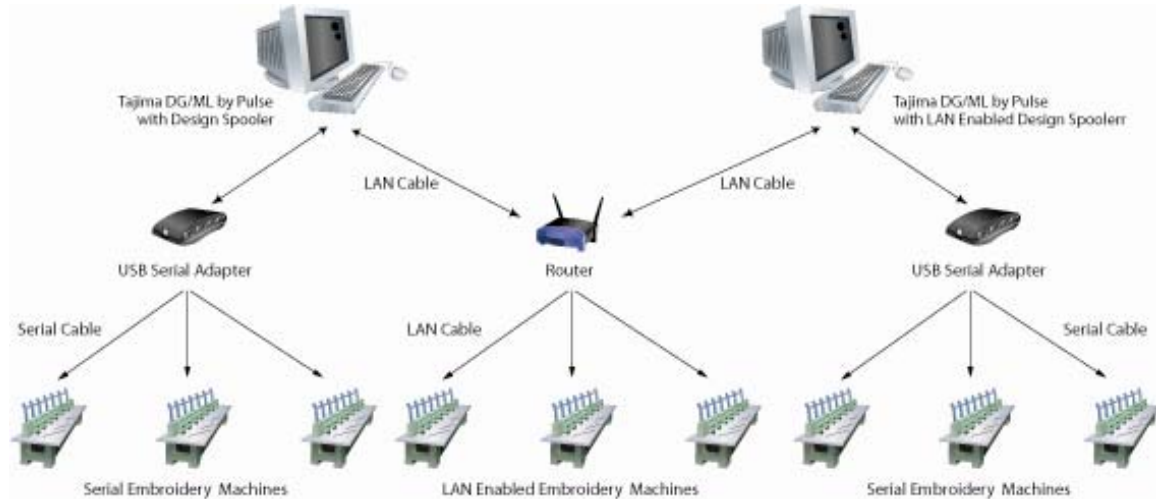
Non-LAN machines can take advantage of the Design Queue. Multiple designs can be sent to the queue for the machine and designs can be downloaded one at a time in the order that is specified in the queue.

For Non-LAN embroidery machines, Design Spooler must be installed on each computer where machines will be connected. This is done by selecting Yes to the Embroidery Machine Connection question during the install of Tajima DG/ML by Pulse. The illustration below describes the connection for a single computer connected to both LAN and Serial based embroidery machines.



If several computers are connected to a network of both LAN and Non-LAN based embroidery machines, one computer must be designated as the Design Spooler for LAN enabled machines. Other design spoolers on the network must have LAN support disabled (this is the default option). All LAN based machines are controlled from one

Design Spooler per network. See the section, “Design Spooler Settings in Tajima DG/ML by Pulse” in this document for more information. The illustration below describes the connection for multiple Tajima DG/ML by Pulse computers connected to both LAN and Serial based embroidery machines.



Each Tajima DG/ML by Pulse workstation comes with licenses to connect to 2 serial based embroidery machines at least. Licenses to add additional serial or LAN based embroidery machines are available from your distributor.

Troubleshooting

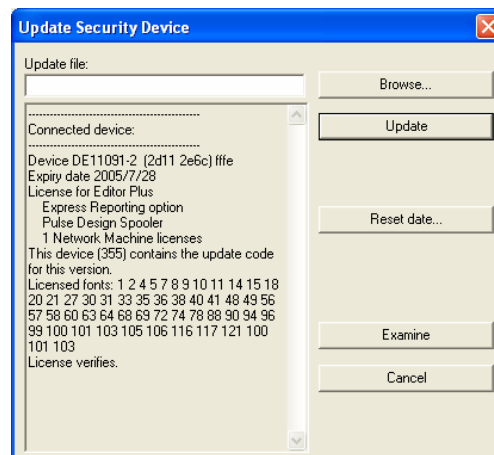
Here are some tips that can help you troubleshoot problems when connecting LAN enabled embroidery machines to your network.

Network Setting on the Machine Changes from Yes to No

If the Network setting on the embroidery machine changes from Yes to No after a few seconds then the embroidery machine is not able to find the design spooler on the network. Check the following items in order to resolve this problem.

1. Make sure that the design spooler is running and that the computer running Design Spooler is connected to your network. The Design Spooler service usually will start automatically when Windows starts. Your security device must be connected in order for Design Spooler to start. To verify that Design Spooler is starting correctly, you may want to start Design Spooler in Support Mode. See below for more information on Support Mode.
2. Make sure your embroidery machine is properly connected to your network and that your network is using a router or DHCP Server. See your System Administrator or computer technician for details.

3. Check to see that one computer on your network is running Design Spooler that is enabled for LAN machine support. See the section “Design Spooler Settings in Tajima DG/ML by Pulse” earlier in this document for information on how to enable LAN machine support.
4. If your computer or embroidery machine is behind a firewall, you must grant the DesignSpooler.exe application access to your network. Design Spooler uses TCP Port 9050 and UDP Port 4564. See your System Administrator or computer technician for details. If you are using Windows® XP SP2, Windows® firewall is on by default. See below for information on checking Windows® firewall settings.
5. If two or more network cards are installed into the computer running Design Spooler or the computer has a built in wireless network card, make sure that only one network card is enabled. If more than one network card is enabled, Design Spooler will not know which card to bind with. Design Spooler can not communicate on a computer where the network cards are bridged.
6. Verify that your computer is able to communicate with your router or DHCP server by using the Windows® Ping command. See below for more information.
7. Make sure you have enough network machine licenses on your security device. A network machine license is required for each machine on your network and can be purchased from your distributor. To verify the number of network machine licenses you have, start the Tajima DG/ML by Pulse software on the computer running Design Spooler. Next select Tools—Update Security Device. You should see a dialog box similar to the one below:



This screen will display the number of network machine licenses that you have. In the example above, the security device is programmed for 1 network machine license. If you do not see any information about network machine licenses on your system, you may not have any network licenses. Contact your distributor for information on obtaining additional network machine licenses.

8. Design Spooler has the ability to bind with only one network card. If two or more network cards are connected on the same computer, Design Spooler does not have the ability to select which network card to use. This would cause a problem if your computer is accessing two different networks or routers. To check to see if two or more network cards are connected, select Start—Control Panel—Network Connections. You should see a screen similar to the following:

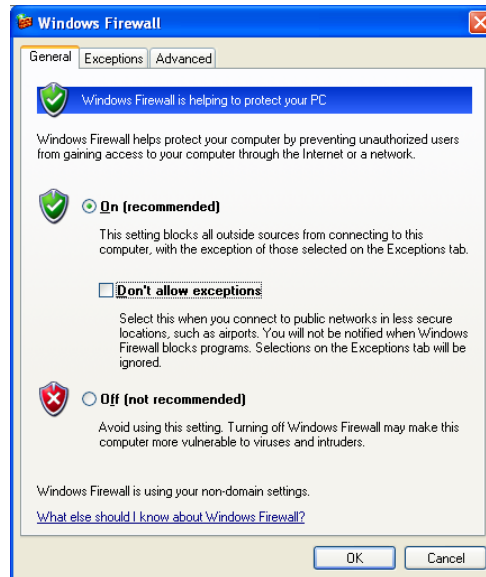


Check to make sure that the network adaptor that is used to connect to the router network where the embroidery machine is located is the only network adaptor connected. In the image above, two network adaptors are connected. To disable one of the network adaptors, right click on the network adaptors and select Disable. Make sure you are not disabling the adaptor that is used to connect to your embroidery machines. If only one network adaptor is connected, then no changes need to be made.

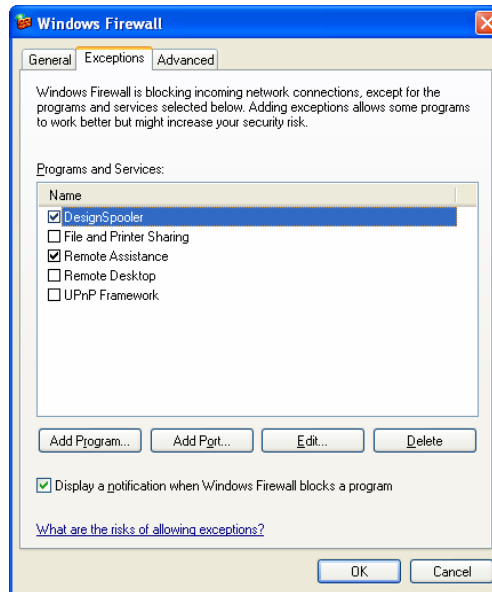
Windows® Firewall

Windows® XP has built in firewall protection to prevent access to your computer by unauthorized programs. Windows® Firewall is enabled by default starting in Windows® XP Service Pack 2. When Design Spooler is started for the first time, you will see a message asking if you wish to allow the Design Spooler application. You allow this application in order for Design Spooler to function. If you are using Windows® XP Service Pack 2, you can check to see if the Design Spooler application has been allowed to access your network by following the procedure below.

1. Select Start—Control Panel—Network Connections
2. Right click on the enabled network card and select Properties
3. Select the Advanced tab
4. Click the Settings button next to Windows Firewall. You will see the dialog below:



5. If your Windows® Firewall is set to Off, then you can skip the rest of the steps as Windows® Firewall is not blocking the Design Spooler Application. You may however, have other firewalls installed from different manufacturers that could block the Design Spooler application. See your System Administrator or firewall documentation for information on allowing the Design Spooler Application.
6. If your Windows Firewall is set to On, make sure the option “Don’t allow exceptions” is not checked. This option must not be checked if you wish to allow the Design Spooler to access the network.
7. Select the Exceptions tab. You should see the dialog below:



8. Make sure that DesignSpooler is listed and has a check in the box next to the name. If Design Spooler is not listed, Click OK to close the Windows Firewall dialog box. Next try stopping and restarting Design Spooler in Support Mode by selecting Start—Program Files—Tajima—DGML by Pulse—Stop Design Spooler and then select Start—Program Files—Tajima—DGML by Pulse—Support—Start Design Spooler (Support Mode). A black screen should be displayed with logging information from design spooler. A dialog should be displayed after a few seconds asking if you wish to keep blocking the Design Spooler application from accessing the network. Select Unblock. Next close the Design Spooler in Support mode by clicking the X in the right hand corner of the window. Restart Design Spooler by selecting, Start—Program Files—Tajima—DGML by Pulse—Start Design Spooler. A black screen will be displayed after a few seconds and then will disappear. Windows® Firewall should now be configured to allow the Design Spooler application.

Design Spooler Support Mode

Starting Design Spooler in Support Mode displays information that can help a support technician diagnose problems. You may be asked by a support technician to start Design Spooler in Support mode. To do this, follow the steps below:

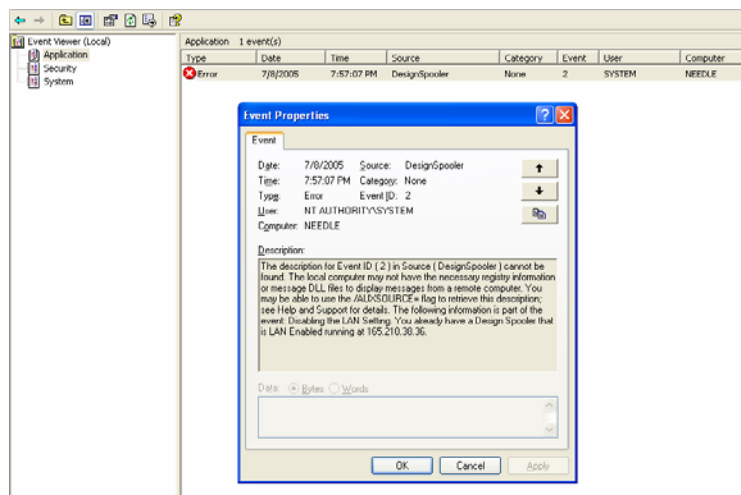
1. Make sure your security device is connected.
2. To make sure that Design Spooler is currently not running, select Start—Programs—Tajima—DGML By Pulse—Stop Design Spooler. A black window will be displayed for a few seconds and then disappear.
3. Next, select Start—Programs—Tajima—DGML By Pulse—Support—Start Design Spooler (Support Mode).

A black window will be displayed with information about the status of the Design Spooler. This window needs to stay open while you are trying to communicate with the spooler during your testing. If the black window closes after a few seconds, make sure your security device is attached. Your security device may need to be programmed to access Design Spooler. You should also make sure that the latest maintenance release of Tajima DG/ML by Pulse Edition Xi is installed.

Once the problem has been resolved you can stop the support mode by clicking the X in the right hand corner of the window. After the black window disappears, you can start Design Spooler normally by selecting Start—Programs—Tajima—DGML By Pulse—Start Design Spooler. You can also just simply restart Windows®. Design Spooler will start automatically when Windows® restarts.

Event Viewer

Design Spooler normally runs as a Windows® service. Windows® services do not usually run silently in the background and do not display messages to the user. The Event Viewer allows you to view error messages and information generated by Windows® services. The Event Viewer is a useful tool when trying to troubleshoot problems with Design Spooler. To display the Event Viewer, select Start—Control Panel—Administrative Tools—Event Viewer. Next, select the Application Log from the list on the left. You may see a number of messages in this view. Look for entries that display DesignSpooler in the Source column. An example of the Event Viewer is displayed below:



Double click on the entry to display more information. In this example, the Design Spooler was unable to enable LAN machine support because another LAN enabled design spooler was found on the same network. The IP address of the computer running the LAN enabled Design Spooler is also displayed. You can only have one LAN enabled Design Spooler on your network.

Using the Ping Command

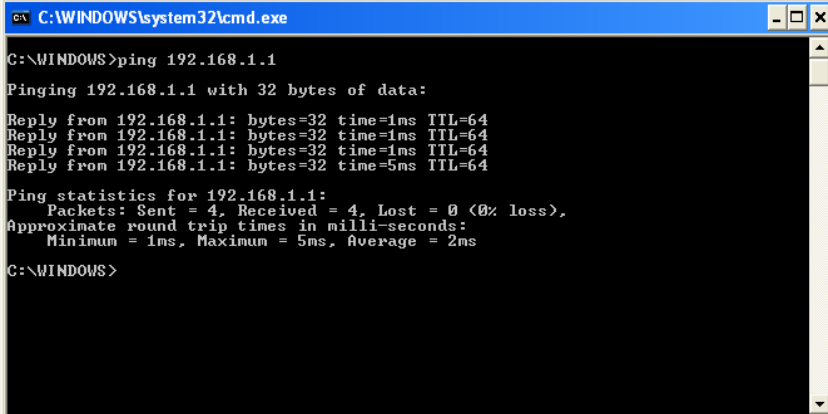
The Windows® PING command can be used to verify that your computer is correctly connected to the Wireless Router. Follow the steps below to verify the network connection:

1. Select Start—Run and type CMD in the run dialog and click OK.
2. You should then see a black MS-DOS window. Type the following command at the MS-DOS prompt:

Ping 192.168.1.1

and press the Enter key.

3. The address 192.168.1.1 is the default address of the Wireless Router. If you have configured your network differently than described in this document, the address of the Wireless Router may be different. You should see a screen similar to the one below:



```
C:\WINDOWS\system32\cmd.exe
C:\WINDOWS>ping 192.168.1.1
Pinging 192.168.1.1 with 32 bytes of data:
Reply from 192.168.1.1: bytes=32 time=1ms TTL=64
Reply from 192.168.1.1: bytes=32 time=1ms TTL=64
Reply from 192.168.1.1: bytes=32 time=1ms TTL=64
Reply from 192.168.1.1: bytes=32 time=5ms TTL=64

Ping statistics for 192.168.1.1:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 1ms, Maximum = 5ms, Average = 2ms
C:\WINDOWS>
```

If the connection is successful, you should see Reply from ... messages and all of the packets that were sent should show as received in the Ping statistics. If the packets are not received, recheck the network settings of your computer and try again.