

Barudan

Design File Server

COM Protocol Mode

Set-up Guide

Version 1.75.00

Menu:

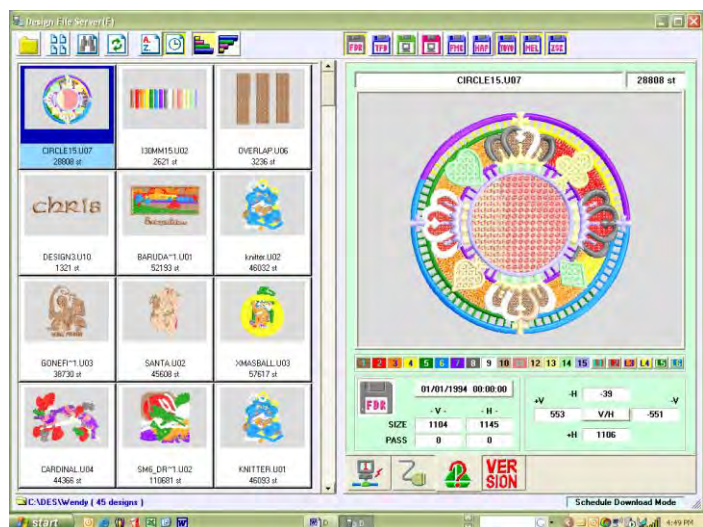
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1. Introduction

Design File Server is a Network software program that helps you easily and quickly download your designs without using disks.

Note: This guide was written specifically for setting up machines and DFS to use the COM Protocol Mode. For other Modes and more details, please refer to the DFS Instruction manual for complete instructions.

- Connect up to 8 machines using COM and 1 LAN connection, for a total of 9 machine connections
- Faster download speed – 10 times quicker than traditional COM connection
- COM Protocol mode allows you to queue designs on your computer that can be viewed on your machine! (up to 95 designs per machine)
- Once designs are queued, the PC can be left alone
- Server can automatically clear designs from queue when downloaded
- Design management screen shows your design name, colors, stitch count, and size
- Expanded memory for older DT machines using Compact Flash technology. Limited only to the size of your CF card (32 mg = 10 million stitches)
- Reads 7 popular embroidery stitch formats



2. Parts needed:

You can order these parts from Barudan America, Inc. to set up your DFS Network. For support reasons, it is highly recommended buying these items from Barudan. Call Parts Department to place an order (800) 273-3672.

- **ZN30140 CABLE, 9 PIN, 25 Ft SERIAL**
Needed for each machine connected to the network.



- **A100625 USB SERIAL ADAPTER**
Order if you need to add more COM ports to your computer. Each adapter adds another COM port to your PC. Then you plug the ZN30140 cable into the adapter to make the connection to the machine.



Additional Parts:

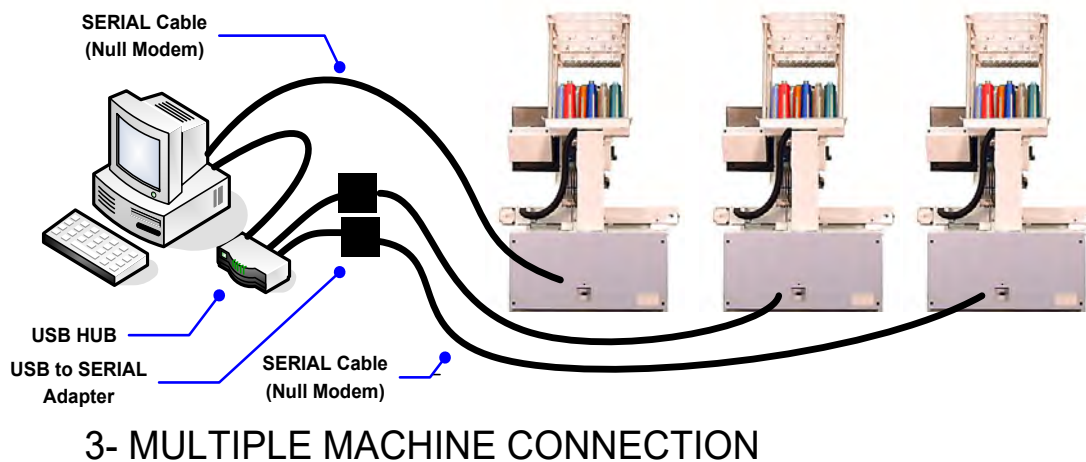
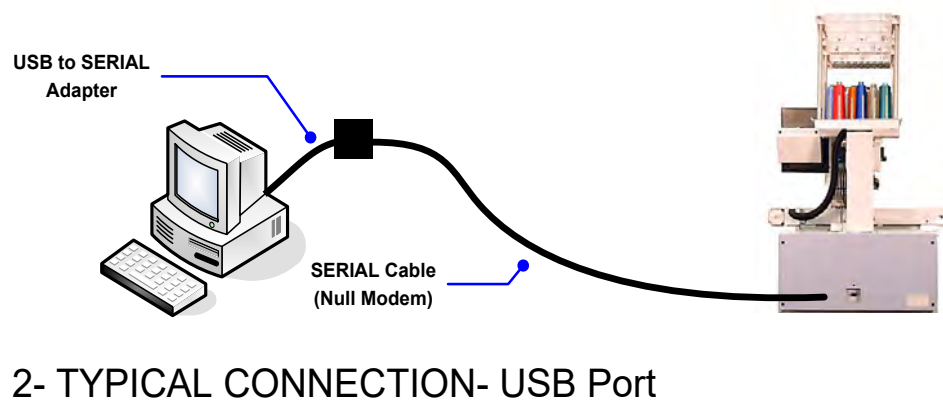
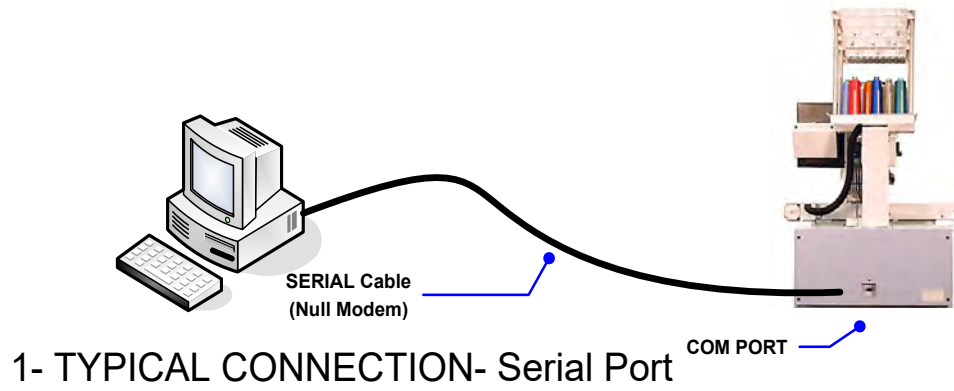
You can purchase the following parts from a local retail store that sells computer supplies.

- **USB Hub**
If you need to add more USB outlets to your PC, you can purchase a USB Hub locally. Make sure to specify USB 2.0 compatibility.
- **Serial Cable extensions**
If the ZN30140 Serial cable is not long enough, you can purchase a 9 pin M/F serial extension cable. Should be able to safely add an additional *75ft cable.

(* Exact cable length limitations depend on the computer, cables, and environment etc... If connections are needed longer than 100ft, may want to consider LEM WG10, Jr or Pro software. Call your local sales person for details on purchasing these products)

3. Connection Diagrams

Use one of the following connection diagrams below to connect your machine(s) to the PC. Each machine needs a Serial cable (Part# ZN30140) to connect to a COM port on the PC. If your computer doesn't have a COM port, or you need to add another COM port, you can use a USB to Serial Adapter (Part# A100625) as shown below in Diagrams 2 & 3.



4. Installation of Design File Server

■ System requirements

Operation System	Windows Vista/ *Windows 7, 8, 8.1, 10
Processor (CPU)	Pentium 4 or higher/ 2GHz or higher
RAM	3GB or more for 32bit OS, or 8GB for 64bit OS
Hard Disk	At least 15MB or larger
Number of Pixels	XGA (1024x768) or higher
Color Depth	Optional Color
Others	<ul style="list-style-type: none">• For COM connections, machine requires a COM port or USB to Serial (COM) adaptor• LAN Protocol is TCP/ IP• For LAN connection, machine requires a LAN Port, Adapter, or LAN Card• For LAN, MS Firewall turned off. Program uses Port 8000

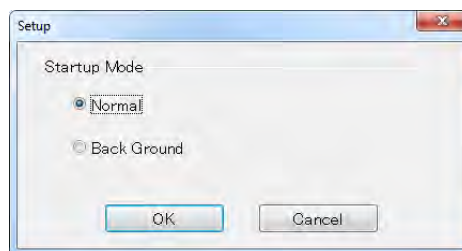
■ Design File Server Installation

* Be prepared to “restart” your computer to complete the install process.

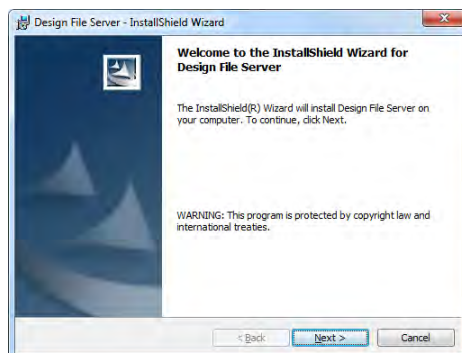
- 1) Save the  **DFS_V1.75.00.zip** file to your C:\Drive. (Do not use the Desktop).
- 2) Right click on the “**DFS_17500.zip**” and select “Extract All...” and press “Extract”.
- 3) Right click on the “**DesignFileServerSetup.exe**” and select “**Run as administrator**” to start the install process.  **DesignFileServerSetup.exe**
- 4) The following Setup screen is shown.

Select “Normal” or “Background” mode and then Click “OK” to continue.

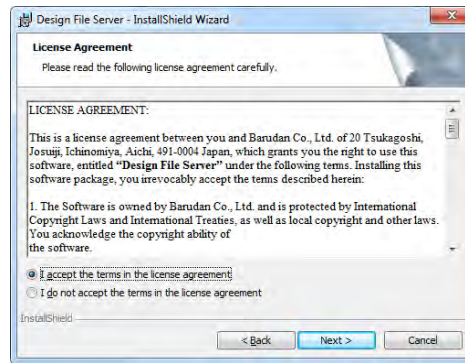
* For more details on Background mode, refer to the complete DFS Instruction Manual.



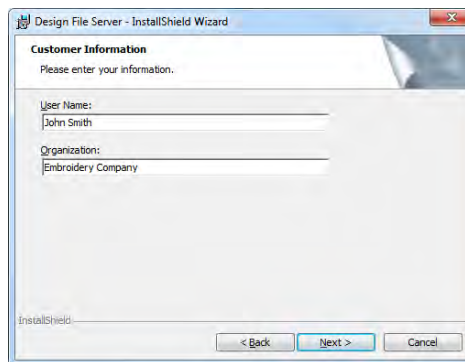
- 5) Click the **Next** button, as show below.



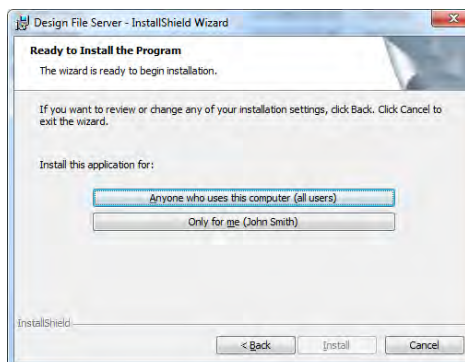
- 6) Click the “**I accept the terms in the license agreement**” after reading the license agreement, and then click the Next button.



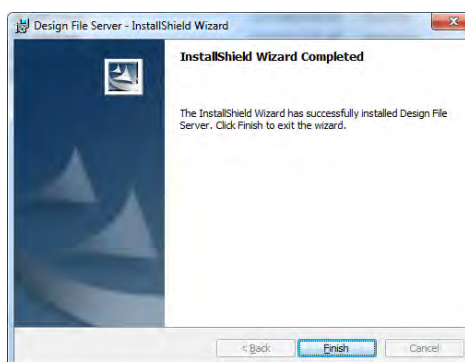
- 7) Enter your information in the screen shown below, and then click the **Next** button.



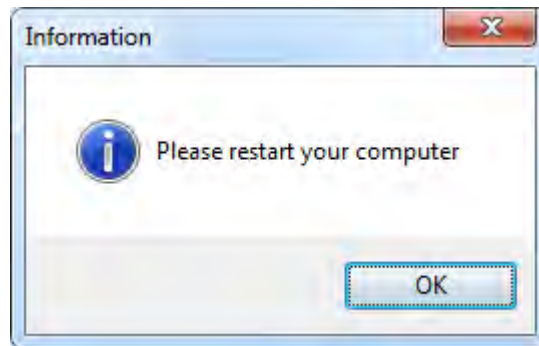
- 8) Select “Anyone....” or “Only for me” option to start the Install procedure.



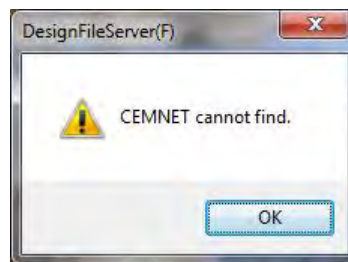
- 9) Click **Finish** to exit the installation.



10) Click OK to close this message. Then Restart your computer.



* Note: It's very important that you restart your computer to complete this installation. If you do not, DFS will not start and you'll receive a "Cemnet cannot find" error as shown below.



11) If you receive the following error message, Click **"Unblock"**.



5. Machine Set-up

5.1 KS/KY-Series

Turn the COM Network feature on.

1. Press the **SETTINGS**  Icon on the Main Screen to display the Preferences menu.

2. Press the **NET SET**  Icon to display the Network Setup list.





3. Select the “01: Network” setting in the list by touching and highlighting it as shown above.


4. Press the **MINUS**  or **PLUS**  Icons to change the value to “COM”.

5. Press the **SETTINGS**  Icon again to exit and save the setting.

6. Restart the machine by powering off and back on, in order for these changes to take effect.

7. Afterwards the  network icon will display in the top right corner of the display.

Shows  when the network is connected.

Shows  when the network is disconnected.

5.2 X-Series Machine Set Up



Turn the COM Network feature on.

1. Press the **Setting key** .

2. Press the **E-key**  to display the Network Settings Menu.




3. Use the **Jog Keys** to select “01:Network” setting as shown in the list above.

4. Set to “COM (2)” using the using the   keys.

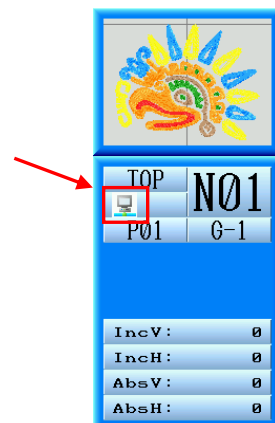
5. Press the **Setting key**  to exit and save settings.

6. Restart the machine by powering off and back on, in order for these changes to take effect.

7. Afterwards the  network icon will display in the Machine Information screen.

Shows  when the network is connected.

Shows  when the network is disconnected.



Machine Information screen

5.3 D and V-Series Machine Set Up

Note: You'll need to call Tech Support to guide you through these next (2) important steps for setting up your machine. Please review these steps and give Tech Support a call. In the US, call (440) 498-3660

1. Check machine system software for D-Series machines. All V-Series are OK.

The following software allows loading designs automatically in CF Drive mode using Protocol mode on the D-Series models.

Automat Type	Software Version
DS/DY/DX	Version 3.20R00 or higher
DT	Version 2.20R00 or higher

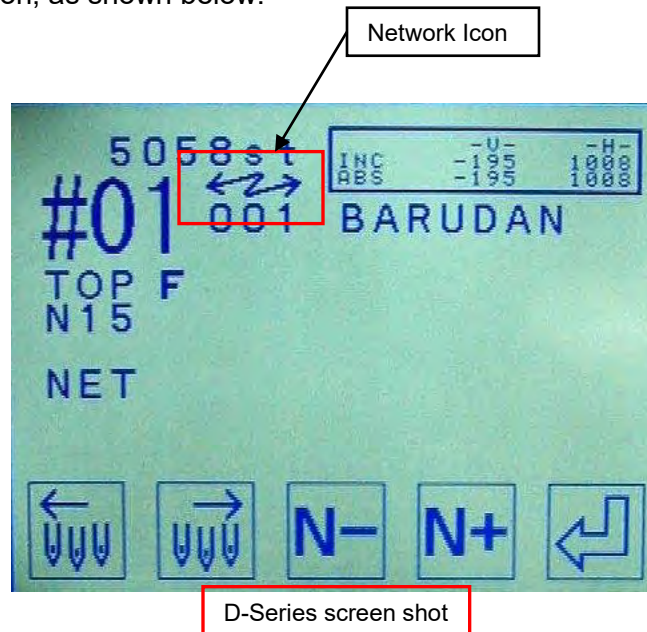
Note: If you do not have the latest D-Series version, go to the Barudan web site to download it. Then install it on your machine(s).

See the following link for software:

<http://www.barudanamerica.com/index/tech-support/software/d-series1.html>

2. Set the “**Network**” parameter in MSU1 to “1” (On) before using Protocol mode.
Call Tech Support for instructions on setting this parameter.

After the Network parameter is turned on, your machine display should show the “Network” icon, as shown below.



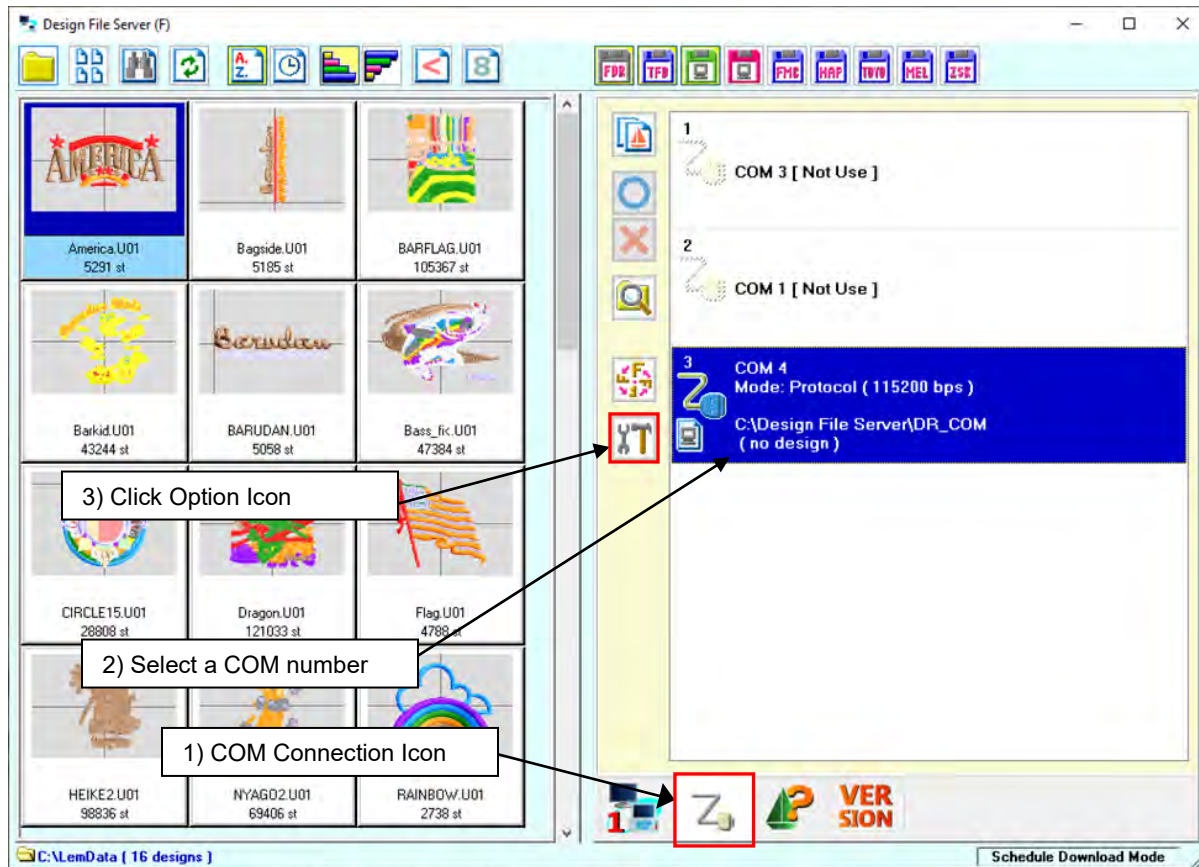
Note: The Network Icon will first appear reversed imaged, when it's first turned on. After the Design File Server recognizes the machine, it will appear as shown above.

For V-Series machines, this Network Icon will be Blue when connected and operating properly. A Red background for this Icon means there is a connection or communication problem.

6. COM Port Set-up

■ Open Design File Server

- 1) Click the **COM Connection Icon** to view the COM List.
- 2) Select a **COM number** in the list for a connected machines.
- 3) Click the **Option Icon** to open the COM Option Menu.



Note: In Step #2, "Selecting a COM number", you may see multiple selections of COM devices. The COM list will show all the COM devices connected to your PC, which for example could be a phone modem etc. If this is the case, and you're unsure as to which COM number is actually a machine connection, please try to program each COM number. This may take some trial and error. But once you identified a COM cable connection, make sure to label the cable going to the machine with this COM number for future reference.

If setting up multiple USB to Serial Adapters, see page 12, "Easy Multiple USB to Serial Adapter Set-up".

- 4) Select **Protocol** Mode in the COM Option Menu (shown below).
- 5) Type in a **COM Name** for the machine (optional).

The screenshot shows the "[COM 1] Option" dialog box. Annotations include:

- A box labeled "4) Select Protocol Mode" pointing to the "Protocol" radio button under the "Mode" section.
- A box labeled "5) COM Name" pointing to the "COM Name" text input field at the top.
- A box labeled "6) Select" with two bullet points: "After Download or" and "Before". It points to the "Delete" section where "After Download" is selected.
- A box labeled "COM Option Menu" points to the title bar of the dialog box.

Other visible elements in the dialog box include:

- Mode:** Radio buttons for "Not Use", "Protocol" (selected), and "Normal".
- Normal Mode Setting:** Includes "BaudRate" (set to 9600) and "Output Disk Code" (radio buttons for "U", "EL", and "F").
- Folder:** Includes "COM Folder" (text field with "C:\Design File Server\DR_COM" and a browse button) and "Watching Folder" (text field with a browse button).
- Interval Converting:** A spinner box set to "1" with "Sec" next to it.
- Delete:** Radio buttons for "After Download" (selected) and "Before" (with a "3" day spinner and "days" label). A "Clear all files" button is also present.
- Buttons: "OK" and "Cancel" at the bottom.

- 6) Select the "**After Download**" or "**Before XX days**" to delete designs in the COM folder.



Note: The COM folder is where the Design File Server saves designs to be viewed and downloaded for the selected machine(s).

- Saved designs in the COM Folder are automatically deleted after they are downloaded, when you select the "**After Download**" box. Or you can assign how many days these designs are saved, before they are deleted by checking the "**Before**" check box. The default setting for the "Before" date is 3 days. This can be adjusted from 1 to 10 days.
- Pressing the "**Clear all files**" button, deletes all the saved designs in the COM folder. If there are designs being downloaded at the time you press the "Clear all files" button, those designs will not be deleted.

- 7) Click the **OK** button to save settings and exit menu.
- 8) Close Design File Server, and re-open it to register the change.

After re-opening Design File Server, make sure the machine is also turned ON. Check the COM Port Status Icon for the connected machine. It should show "Connection Active" as shown below.

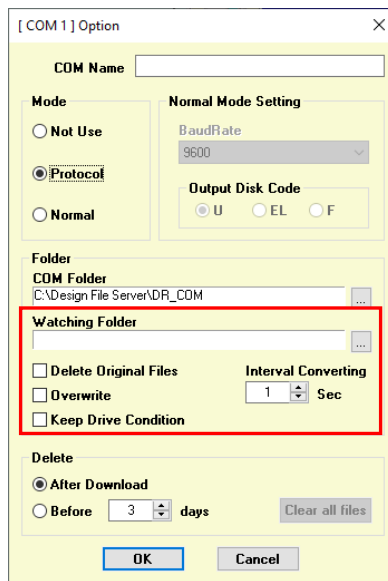
COM Port Status Icons (in COM List):

	Connection Active	Indicates that the machine is powered On and properly connected to the server. Ready to receive designs.
	Connection In-Active	Indicates that this connection is not active, or has no connection. Check that machine is powered On and check cable connections. If there's still a problem, try closing Design File Server, and then Re-open it

■ COM Option Menu, Additional settings

Watching Folder Option

- Selecting a Watching folder allows the user to save a design (.U01 or .dst) into this folder, and the DFS program will automatically copy this design to the COM folder. In other words, you can copy a design to a machine, by simply saving the design in this “Watched” folder. This feature automates Step 8 (Copying Designs to Machines) in this write-up.



- **Delete original files option.** Checking this box, deletes the design file from the watched folder, after the design is copied to the COM folder. This is recommended, if you use the Watching Folder option.
- **Overwrite.** This feature will overwrite the .prj file in the COM folder, if it already exists in the COM folder.
- **Keep Drive Condition.** Disables Drive condition and keeps original .PRJ design settings. (See Complete DFS manual more details)
- **Interval Converting.** This is the time interval of when the design file in the watched folder is converted to a .prj file and saved in the COM folder.

■ Easy Multiple USB to Serial Adapter Set-up

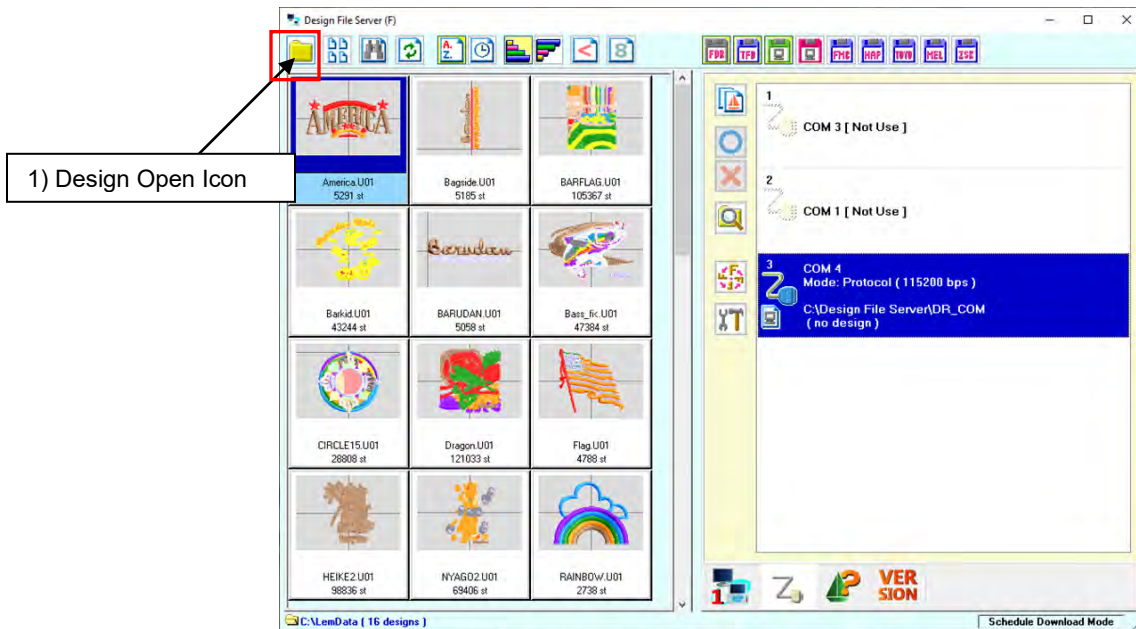
1. If you have USB to Serial Adapters to set up, unplug all the USB to Serial Adapters from the PC to start with.
2. Close and re-open Design File Server.
3. Memorize or write down all the COM numbers in the COM List.
4. Close Design File Server
5. Plug in (1) USB to Serial Adapter.
6. Re-open Design File server.
7. Look at the COM list and see which New COM number was just added (compare to list in step 3). The new COM number added to the list is the USB to Serial Adapter you just plugged in. Label the USB to Serial Adapter with this COM Number and Set it up in Design File Server.
8. Repeat steps 4 through 7 for each of the remaining USB to Serial Adapters.

7. Design List Set-up

(Note Before using Design File Server.)

Please designate a folder on your PC to save and keep all your designs in. This folder will contain all the available designs to be scheduled for your machines. It's preferred to save your designs in FDR HD format (*.U01), so you can assign and save your color changes in the design. The other popular format is .dst. However the .dst format doesn't allow color codes to be assigned, just stop codes. It's your preference.

1) Click on the **Design Open Icon** to open the Browse Folder Menu



The following **Browse Folder Menu** will appear, as shown below.

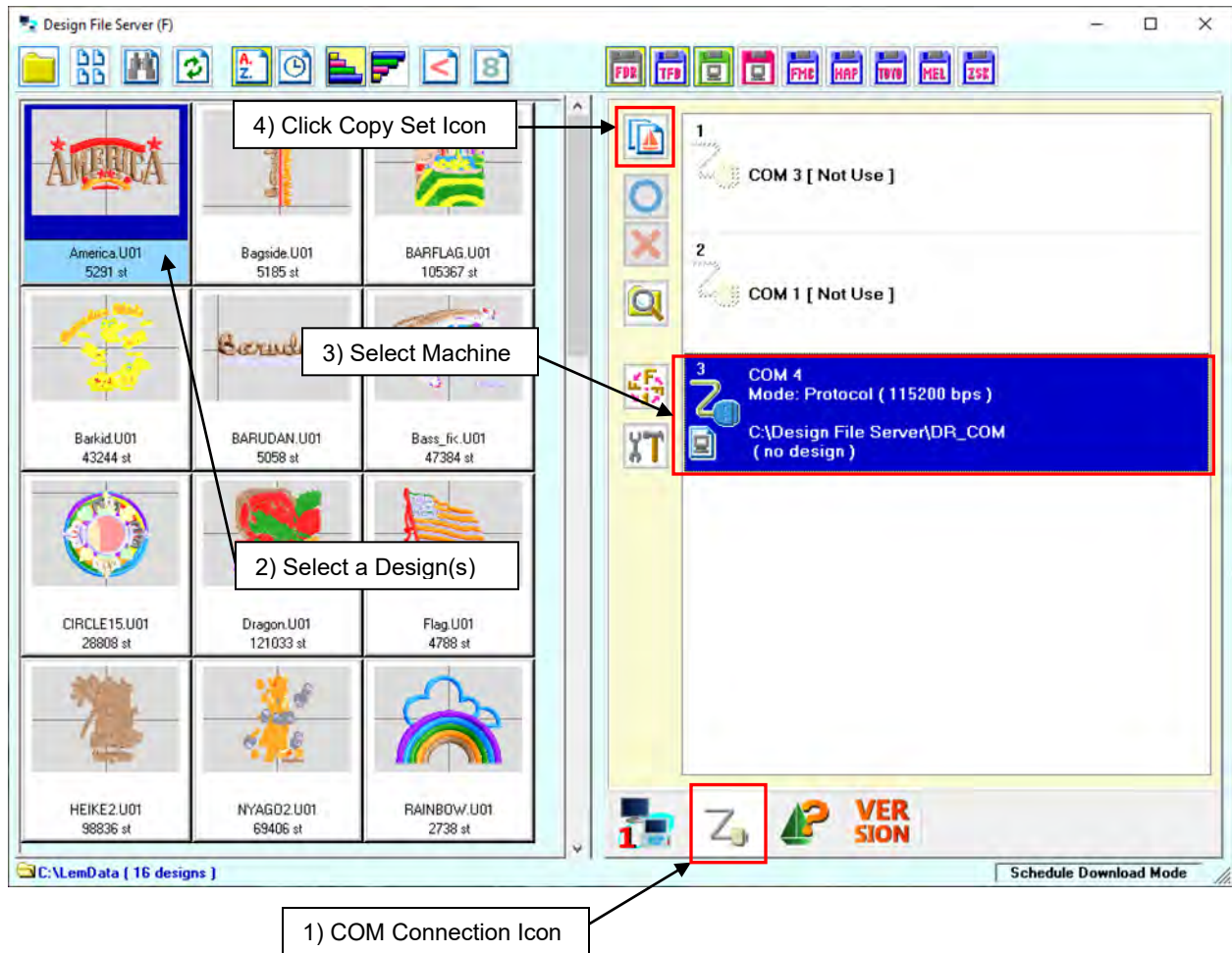


2) Use this menu to **Select** your designated folder of designs and Click **OK** to save.

8. Copying Designs to Machine(s)



- 1) Click the **COM Connection Icon** (if not already selected).
- 2) Select a **Design** (or group of designs) in the Design list.
- 3) Select a **Machine** in the COM list to assign the designs to.
- 4) Click the **Copy Set** button to copy the designs.

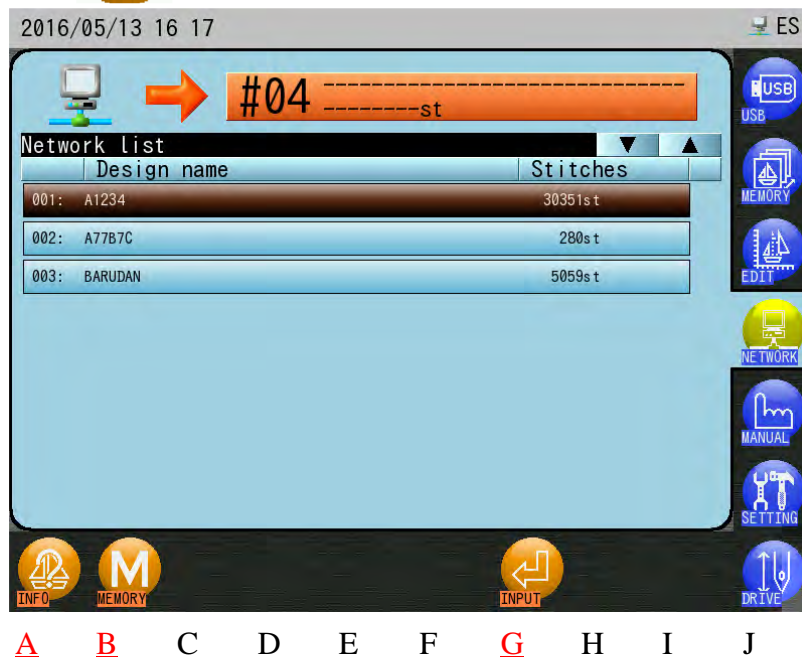
Note: These designs are copied to the **COM folder** on the PC, which makes them available to be viewed and downloaded to the selected machine.





9. Downloading a Design to the machine

9.1 KS/KY Instructions

- 1) Press the **NETWORK**  icon on the Main screen to display Network menu.
- 2) Press the **INPUT**  icon to display the COM Protocol mode screen.

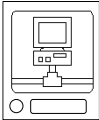


- 3) Select a design in the list by touching it.
- 4) Press the **G**-icon  to start downloading.

* Designs downloaded from the server will have this **Network**  icon in the design information area for indication.

9.2 X, V, and D-Series Instructions

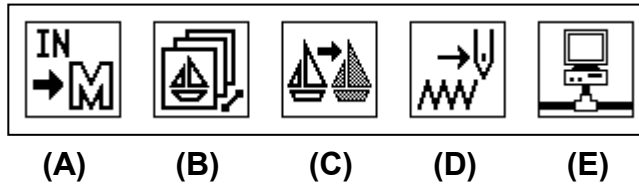
Note: The following instructions are generalized for various model machines for downloading. For more detailed instructions, please refer to the Automat Instruction Manual for your specific model machine.

- 1)  For XS, XT, XY, VS, VY, DS, DY, DX machines:
Press the **“Network”** Key to display the design list.

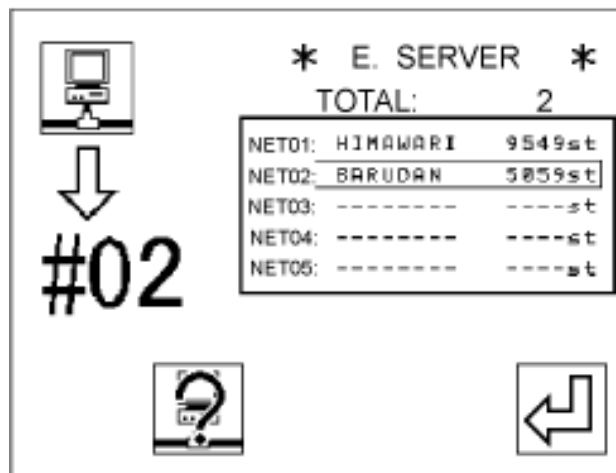
For the VT, DT machines:

Press the **Menu** key, and then the **E-key**.

Menu on the VT, DT machine:



- 2) The COM folder of designs on the PC appears on the Automat in the E. Server list.
Select a **Design** using the jog keys.



(Screen shot of DT machine)
Other machines similar

- 3) Press the **key** below the  icon to download the design into memory.









Note: If you are downloading a large design to a DT machine, insert a CF card in the Automat. If there's not enough memory in the Automat, the design will automatically be loaded in CF Drive mode.

10. Main Display Information

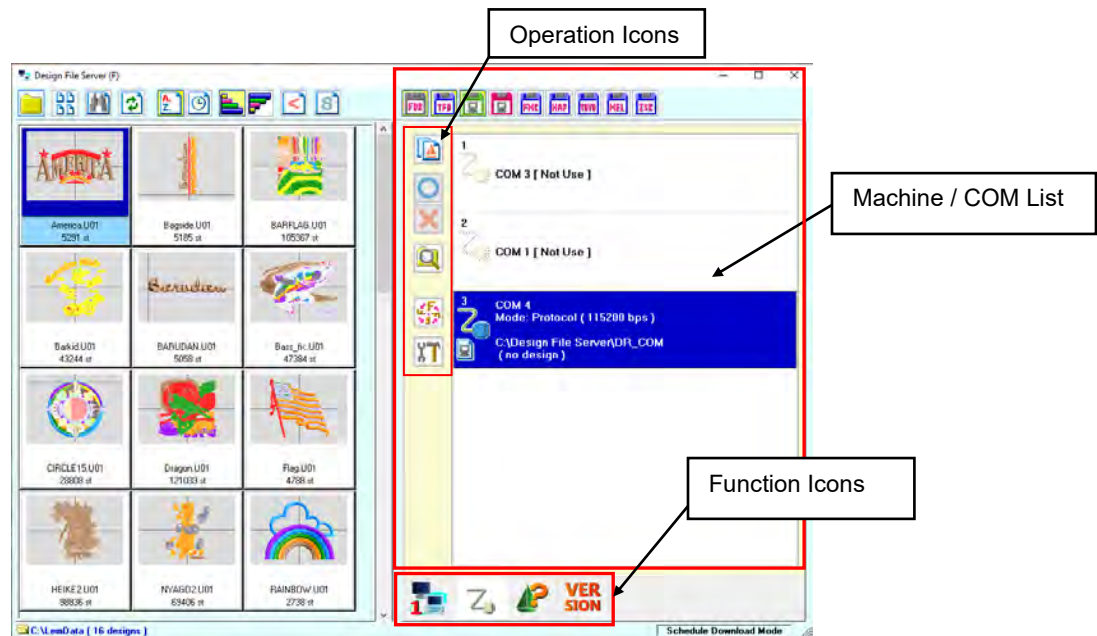
Note: For complete details on DFS display and operation, please refer to the DFS Instruction manual.

■ Design List Function Icons







Icon	Name	Function/Operation
	Design Open Icon	<u>Select Design Folder.</u> 1. Click the Design Open Icon. 2. Select the reference folder to open your designs. 3. Click the OK button.
	Change View Icon	<u>Change View.</u> Click the Change View Icon to switch to large, middle, small, minimum and list view. <u>To select a design.</u> When using the large, middle, small and minimum view. <ul style="list-style-type: none"> • Singular Selection. Choose and Click on the design. • Multiple Selection. Choose and Click with the Ctrl key on the designs. • All selection. Press the Ctrl and A key. When using list view. <ul style="list-style-type: none"> • Singular Selection. Choose and Click on the design. • Multiple Selection. Choose and Click with the Ctrl key on the designs. • Range Selection. Choose and Click on the first design, and then click with the shift key on the next designs in the list. • All selection. Press the Ctrl and A key.
	Search Icon	<u>Focused search</u> is a function to search the "Designs list" by the design names. Wild card (*) is available. For example, all files with an "A" at the beginning are displayed, when you input "A *". 1. Click the Search Icon. 2. Input the Design Name. 3. Click the OK button to view the design. 4. To Cancel the design search, Click the Search Icon. 5. Click the Clear button.
	Update Icon	<u>To update the design list.</u> Click the Update Icon to update the design list after saving new designs in your folder.
 	Sort Icon (R) Date & Time (L) Name, A to Z	To sort the designs in the design list. Click the Sort Icon.
 	Sort Icon (R) Ascending order (L) Descending order	To sort the designs in the design list. Click the Sort Icon.





■ Function Icons



Function Icons

Icon	Name	Function/Operation
	LAN Connection Icon	Click the LAN Connection Icon to change the display to the LAN connection screen.
	COM Connection Icon	Click the COM Connection Icon to change the display to the COM connection screen.
	Design Viewer Icon	Click the Design Viewer Icon to view the selected design in the design list. To cancel the design viewer, Click the LAN Connection Icon or COM Connection Icon.
	Version Viewer Icon	Click the Version Viewer Icon to check the version number of Design File Server. To cancel the Version Viewer, Click the LAN Connection Icon or COM Connection Icon.

Operation Icons

Icon	Name	Function/Operation
	Copy Set Icon	Select a design or designs from the design list. Then click the Copy Set Icon to copy the selected designs to the COM folder.
	COM Folder Preview Icon	Click on this Icon to view all designs that have been copied to this COM port \ folder.
	Drive Condition	These settings determine if a drive condition is applied to designs. (See complete DFS manual for more details)
	COM Option Icon	Click on this Icon to open COM Option Menu. Use this menu for selecting COM port settings.