USB Device Server

1 Port USB 10/100 Mbps Device Server

PM1115UMF

Instruction Manual

Actual product may vary from photo

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FCC Compliance Statement

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

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Introduction

Thank for purchasing a StarTech.com USB Multifunction Printer Server. Offering seamless integration of multifunction, all-in-one or standard printers for use on a network, PM1115UMF allows each user to share print, scan, card reader and fax functions throughout the network as though connected directly to each individual computer. PM1115UMF also allows network users to monitor ink and paper levels using bi-directional communication.

Features

- Supports print, scan, card reader and fax sharing functions on Windows 2000 SP4 and above, and Windows XP SP1 and above
- Supports Windows XP scanning utility
- Supports scanning utilities provided by printer manufacturers
- Supports TCP/IP network protocols in Windows 98SE and above, Mac OS 9.x and above, Unix and Linux
- Supports print function sharing in Windows 98SE and above, Mac OS 9.x and above, Unix and Linux

Before You Begin

System Requirements

• Operating System: (**For use with multifunction printers**) Windows 2000 SP4 and up
Windows XP SP1 or higher

(**For use with standard printers**) Windows 98SE or above
Mac OS 9.0 or above

• Multifunction Printer/Printer with USB capability

• An available TCP/IP network connection

Contents

This package should contain:

- Multifunction Print Server (1)
- Power Adapter (1)
- User Manual (1)
- Drivers CD (1)

Hardware Installation

Notes:

1. **Please ensure that the power adapter included with PM1115UMF is the only power adapter used with this product, as any variation could damage the Print Server.**

2. **When installing the Print Server, please be sure to power on the Print Server prior to powering the multifunction printer/printer.**

3. **Prior to installing the Multifunction Print Server, please ensure that the software for the printer has been installed. This will facilitate Print Server installation, as it will simplify the identification of the multifunction printer/printer software.**

1. Connect one end of the USB cable to the USB port located on the front of the Print Server.

2. Connect the opposite end of the USB cable to the multifunction Printer/Printer.

3. Connect one end of a Cat5 Ethernet cable to the RJ45 port, located on the back of the Print Server.

4. Attach the remaining end of the Cat5 Ethernet cable to your network.

5. Connect the circular connecter located on the power adapter to the power port on the Printer Server.

6. Connect the opposite end of the power adapter to an available power outlet. Once power has been applied to the Printer Server, it will perform a Power-On-Self-Test. Once the test is complete, the **Status** light on the Printer Server will turn off, indicating that the Print Server is now connected.

7. Turn on the multifunction printer / printer.

Windows XP/2000 Multifunction Print Server Software Installation

1. Insert the drivers CD into the CD-ROM / DVD-ROM drive.

2. Once the installation utility loads, you will be prompted to select the type of installation (**MFP Server Setup** or **Print Server Setup**), as well as the desired language. Please select **MFP Server Setup**, and **English** respectively.

3. After the selections have been made, the **MFP Server Utilities - InstallShield Wizard** will be displayed. Please click on **Next** to advance.

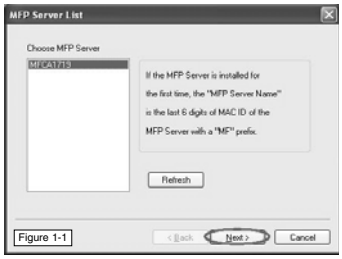
4. The next screen allows you to specify the destination of the installation files. In most cases, this will be left as the default location (**C:\Program Files\MFP Server Utilities**), unless there are special circumstances requiring installation elsewhere. Click **Next** to begin installing the MFP Server Utilities.

5. Following installation, the **MFP Server Configuration** screen will be displayed, and provide the option to configure the MFP Server. Please select **Yes, I want to configure the MFP Server now**, and click **Next**.

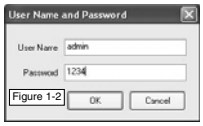
Configuring the Server for use with a multifunction printer

1. After selecting **Yes, I want to configure the MFP Server now**, the MFP Server List will automatically search for and display MFP Servers on the network, as shown in **Figure 1-1**.

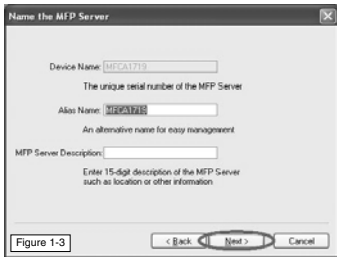
   Select the server you want to configure and click **Next** to continue.



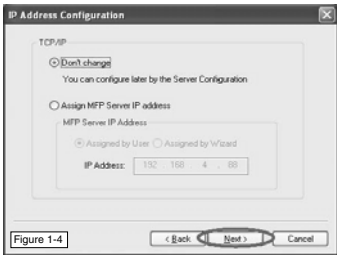
2. **Figure 1-2** depicts the User Name and Password dialog required to continue configuration. Please enter the default user name (**admin**) as well as the default password (**1234**), and click on **OK**.



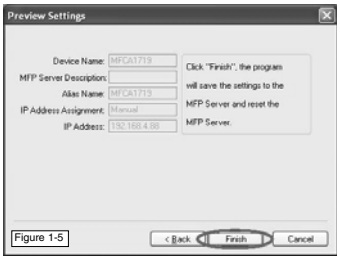
3. Set the **Alias Name** and the **MFP Server Description** as outlined in **Figure 1-3**. Defining these attributes facilitates managing the MFP Server.



4. Setup the IP address of the MFP Server and click **Next**. The MFP Server IP address should be in the same network segment with the connected computers. If you are unsure of how to set up the IP address, it is recommended that you select **Assign MFP Server IP Address** and choose **Assigned by Wizard**, which will automatically assign a valid IP address to the server.



5. Once the necessary information has been configured, a window will appear allowing you to preview the settings, as depicted in **Figure 1-5**. To correct any of the information displayed, please click the back button and replace the entry with the correct information. If the information shown in the preview is correct, please click on **Finish** to complete the configuration.



6. The next screen will indicate that installation is complete. Please click **Finish**.

MFP Server Utilities

After installing the necessary software, please verify that the installation folder contains the following utilities:

1. **MFP Server Control Manager** - Allows you to manage the connection between the multifunction Printer and your computer, for sharing MFP functions.

2. **Server Configuration** - Allows you to configure the MFP Server's IP Address, network protocols and other advanced features.

3. **Uninstall** - Allows you to remove all installed MFP Server software.

MFP Driver/Utilities installation

Following software installation, the **MFP Server Control Manager** will appear, and automatically locate the MFP Server and the connected MFPs in the network. To begin installing the MFP Drivers/Utilities, please follow the steps listed below.

1. Select the MFP you wish to install in the **MFP Server List**, and click **Install Wizard**.

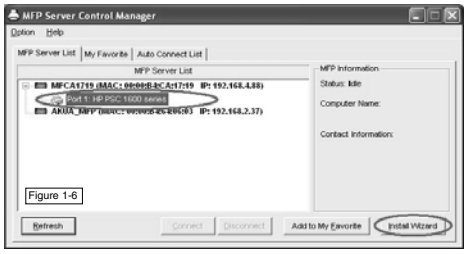


Figure 1-6

2. You will receive a message warning that you have to follow the installation instructions in the manual of the MFP if the MFP requires you to connect the MFP to your computer directly. (If this is the case, please consult the documentation that accompanied your MFP purchase). Please click **Connect**.

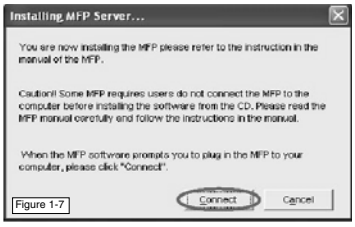


Figure 1-7

3. If the MFP has required you to connect the MFP directly to your computer, please click **Yes.**

4. Prior to creating the connection, you are required to install two kinds of drivers:

   1) MFP Server drivers
   2) Multifunction printer Drivers

   A dialog box will open and guide you through the necessary installations.

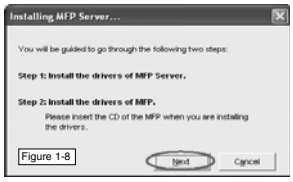


Figure 1-8

Please click on **Next**.

5. To install the MFP Server Enhanced Controller driver, select **Install the software automatically (Recommended)** and click **Next**, once you reach the screen depicted in **Figure 1-10**.

Figure 1-9

6. Upon completion, the **Found New Hardware Wizard will notify that it has finished installing the software** for the MFP Server Enhanced Controller. Please click on **Finish**.

Figure 1-10

7. **Step 2** of installation will now begin. As depicted in **Figure 1-11,** you will be reminded that you are now installing the MFP Drivers. When you are sure that the MFP has been installed completely, please click **Finish**.

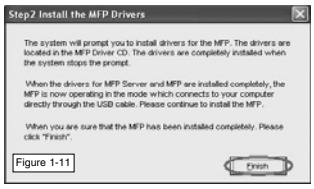


Figure 1-11

8. After the MFP Server Enhanced Controller driver has been installed, Windows will prompt for the installation of the Composite Device driver. Please select **Install the software automatically (Recommended)**. Continue with this installation until you receive the notification that WIndows has completed the installation of the device drivers. Following this, Windows may recommend that the computer be rebooted. Please do so, to complete installation and begin using the Multifunction Print Server.

Using the multifunction printer - Windows XP/2000

Following the necessary software installation and configuration, the multifunction printer is now ready for use. You can now share print, scan and card reader functions as provided by the MFP. From the **MFP Server Control Manager,** highlight the multifunction printer you wish to share, and click **Connect**.


Figure 1-12

Sharing the multifunction printer

1. To locate the installed printer, please open **Printers and Faxes**, as illustrated in **Figure 1-12**.

2. Once the **Printers and Faxes** window opens, please ensure that the printer is listed as being installed. Right-click on the icon that represents the printer, and select **Set as Default Printer**. You can now print documents as though the printer were installed directly to the computer you are using.

Sharing the scanning and/or card reader functions on the multifunction printer

Most multifunction printer manufacturers provide a scan utility with their product. As such, when the MFP is connected and configured for use, the manufacturers software can be used as normal.

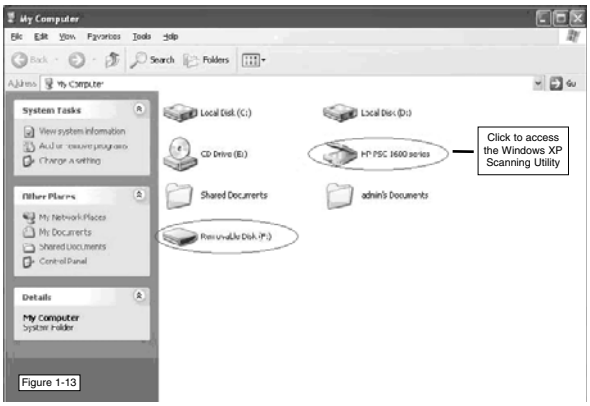


Figure 1-13

Similarly, the Windows XP Scanning Utility can be used, by locating and clicking on the appropriate icon from within **My Computer**.

If the MFP offers card reading capabilities, the card reader will be displayed in **My Computer** as a Removable Disk.

Multifunction printer server list

The **MFP Server Control Manager** can automatically find the MFP server on the network and show it in the MFP Server List. Users can select a MFP and click **Connect** to connect the MFP as if you have the printer connected directly to your computer with a USB cable. Connection status information is also listed.

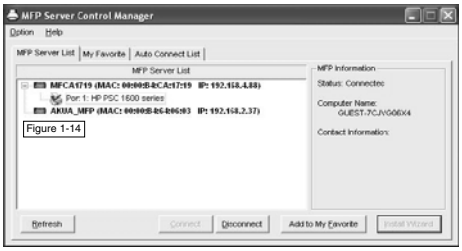


Figure 1-14

MFP Server List
The MFP Server List will list all of the MFP Servers within the network. You can find the MFP Servers information, including **MFP Server Name**, **MAC ID**, **IP Address** and the device that is connected to the MFP Server.

MFP Server/MFP Information
When you are clicking on the MFP Server in the MFP Server List, you will see the MFP Server Description as well as the Idle Timeout setting for the MFP Server.

MFP Server Description – This description helps to identify the server

Idle Timeout – This setting allows administrators to setup idle timeout, preventing idle connections to the MFP. By default, no idle timeout is set.

When you click on the MFP in the Server List, information will be listed on the right hand side, including Status, Computer Name and Contact Information.

Status – *Connected* - indicates that the MFP is connected and ready for use
Idle - indicates that the MFP is not being used
Busy - indicates that the MFP is in use by another user

Computer Name – indicates the computer name of the current MFP user

Contact Information – When contact information is set for the current user, it will be displayed here.

Commands

The MFP Server Control Manager offers the following command buttons:

Refresh - Refreshes the MFP Server List immediately, according to current connections.

Connect - Establishes a connection between your computer and the MFP

Disconnect - Disconnects the selected MFP

Add to My Favorite - Allows you to add the MFP Servers that you frequently use to the **My Favorite List**.

Install Wizard - Launches an installation wizard that assists with connecting to a MFP for the first time

Auto Connect List

The Auto Connect feature allows you to configure the MFP to accept print requests upon immediate availability of the MFP.To add the MFP to the Auto Connect List, please follow the steps below. To add a MFP to the Auto Connect List, please follow the steps below:

1. Click **Add** from the **Auto Connect List**.
2. The MFP Servers within the network will be displayed on the following screen. Select the MFP Server you would like to add to the list.
3. Select the MFP that is connected to the selected MFP Server. Click **OK** to finish setup.

Quick Setup

Right-clicking on the icon shown in the system tray **(Figure 1-15)** quickly allows you to view the MFP servers you have entered into your Favorite List. You can directly connect or disconnect the MFP and check the MFP information easily from here.

Status - The current status of the MFP will be displayed here.

Connected indicates that you are connected to the MFP server.

Busy indicates that the MFP is in use.

Idle indicates that the MFP is available for use.

Connect - If the MFP is free to use, **Connect** will be available to click in order to connect to the server. If it is not free to use, **Connect** will be greyed out.

Disconnect - This option will only be available to the current user, allowing you to disconnect from the MFP.

Information - This selection provides further information regarding the status of the MFP, as shown in **Figure 1-16**.

Server Configuration

This section introduces the MFP Server's system configuration utility in a Windows environment. This utility provides complete MFP Server management and configuration functions, listing all available MFP servers on the left side of the screen. Please note that this utility only provides configuration functions for the MFP Server itself, it does not include configuration functions for client side or other file servers in the network environment.

The following legend describes what each icon at the top of the Server Configuration screen represents:

= **Status**

= **Setup**

= **Report**

= **Refresh**

= **Restart**

= **Search**

The **Configuration Utility** provides the following configuration/management functions:

Search MFP Server - Allows you to search All Available MFP Servers on the Network. To scan for any MFP Servers on the network, please click on the **Search** icon at the top of the Server Manager window:

Status - Selecting the **Status** button on the Server Manager toolbar will Display the MFP Server Network Status, including MAC ID, Model type, Firmware Version, status of each server port, IP Address, Subnet Mask, Default Gateway and supported printing protocols. To refresh the MFP Server status, please click the **Refresh** button. To restart the MFP Server, press the **Restart** button.

Setup - Clicking on the **Setup** icon, the configurable properties of the selected server will be displayed on the right side of the window, as shown in **Figure 1-18.**

Figure 1-18

Double click on one of the icons to set up the selected MFP Server. A screen will pop up to verify the **User Name** (**admin**) and **Password** (**1234**)**.**

Once you have entered the settings, please click the **Restart** button to allow the settings to take effect.

General Configuration - Configure general settings about the MFP Server such as Server Name, Password, etc.

TCP/IP Configuration - IP Address and DHCP Server Configuration. Double-click the TCP/IP icon to access configuration settings, including the method of determining an IP Address. Specifically, you can enable the server to automatically configure an IP Address, or specify it manually as shown in Figure **1-19**.

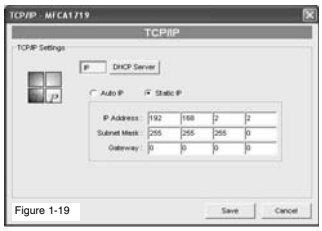


Figure 1-19

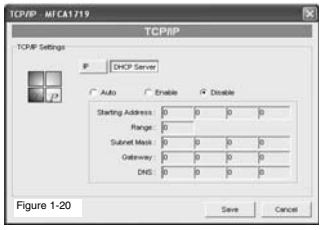


Figure 1-20

Click the **IP** button to enter the IP setting page. If you need the MFP Server to automatically get an IP address from the DHCP server, select **Auto IP**. You can also select **Static IP** to manually assign the IP Address, Subnet Mask and Gateway for the MFP Server.

Click the **DHCP Server** button to enter into the DHCP server's settings page. Here, you can enable/disable the DHCP server and assign a range of IP addresses. By the default, the DHCP server is disabled. If the DHCP is enabled, you have to assign a range of IP addresses. By filling in the **Starting Address**, **Range**, **Subnet Mask**, **Gateway** and **DNS**, the MFP Server will assign a unique IP for each DHCP client. You have another option called **Auto** for the DHCP server, which will automatically detect any DHCP server.

System Configuration - Double Click the **System** icon to bring up the configuration window. The System configuration page allows you to see all available printing protocols and upgrade firmware for the MFP Server. You can use the **Upgrade Firmware** tool to update to the newest firmware of the MFP Server.

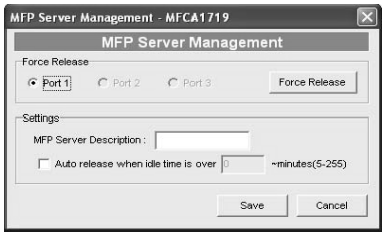
Click the ... button and select the correct firmware for your PC.

After selecting the firmware file, click the **Upgrade** button to finish the firmware update process.

Please note: Prior to upgrading the firmware, the IP Address settings of the MFP Server must match the same network as your computer.

MFP Server Management -

Force Release: Selecting the port number and clicking on **Force Release** will release the current connection between the user and the connected device. This is very useful when a user forgets to disconnect from the MFP, as it allows administrators to release the connection and make the MFP available for use.



MFP Server Description: Enter a 15-digit description of the MFP Server such as location or other information to help users find the MFP Server easily.

Auto Release when idle timeout: To avoid users unnecessarily occupying the MFP, the administrator can setup an idle timeout. It is used to disconnect the current connection after the MFP is idle for a specified period of time. By default, timeout is not specified.

Report - Click the **Report** button to view basic information about all available MFP Servers on the network. The information provided includes Device Name, MAC ID, Model Type and Firmware Version of the MFP Server.

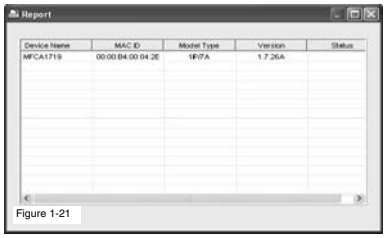
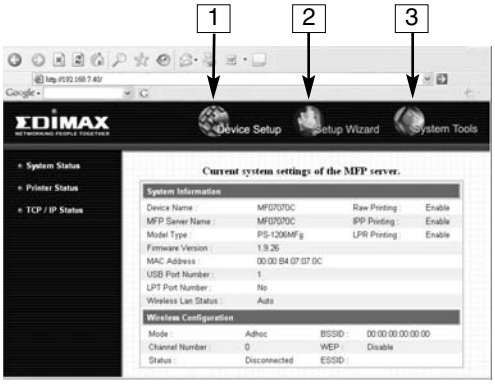


Figure 1-21

Web Management



Through Local Area Network, the Internet, an administrator can easily configure and manage the MFP Server's main functions via a web browser. Simply enter the MFP Server's IP address into your browser's address field to manage the MFP Server by the MFP Server's built-in Web Server.

The default IP Address, User Name and Password settings of the MFP Server are as follows:

IP Address: 192.168.2.2

User Name: Admin

Password: 1234

1. Device Setup

System Status - Once you have entered the necessary credentials, system information will be displayed in the web browser, including **Device Name**, **MFP Server Name**, **Model Type**, **Firmware Version** and **MAC Address.**

Printer Status - This page lists information regarding the multifunction printer/printer connected to the MFP Server port

TCP/IP Status - This page includes all of the TCP/IP settings of the MFP Server, including **IP Address**, **Subnet Mask** and **Gateway**, as well a the status of the DHCP server.

2. Setup Wizard

You can change the MFP Server name and password of the MFP Server from here.

MFP Server Name - the name of the MFP Server. You can use this name to identify the MFP Server when you are searching for the MFP Server by the "Server Manager" utilities.

Password - Allows you to change the MFP Server password. The password can be up to 7-digit alphanumeric format. The default password is **1234**.

Re-type Password - enter the same password for the MFP Server again.

Advanced Settings

TCP/IP Printing - This MFP Server supports the TCP/IP network protocol and LPR/IPP printing protocols. By default these protocols are enabled.

MFP Idle Timeout - To avoid users unnecessarily occupying the MFP, administrators can enable the **Idle Timeout** feature. It is used to disconnect the current connection after the MFP is idle for a specified period of time. The setting range is from 5 to 255 minutes. By default, no timeout is set.

Note: After all users have installed the MFP successfully, it is recommended that the **Auto Release when idle timeout** setting is enabled on each computer, so that the MFP resource will be available to all users equally.

TCP/IP

This section allows you to configure the MFP Server to automatically obtain an IP address from the DHCP server, or use a manually specified static IP address. The MFP Server also has a built-in DHCP server which can be enabled in order to automatically manage the IP address.

If you need the MFP Server to automatically get an IP from DHCP server, select **Enable Obtain TCP/IP Settings Automatically (Use DHCP/ BOOTP)**. You also can select **Disable Use the following TCP/IP Settings** to manually assign the **IP Address**, **Subnet Mask** and **Gateway** for the MFP Server.

Save Setting

Click on **Save Settings** to retain all changes made. For the settings to take effect, please click on **Yes** when prompted to reboot.

3. System Tools

Load Default - System Tools allows you to load the factory default settings for the MFP. All changes made will be lost.

Upgrade Firmware - Allows you to upgrade to newer firmware for the MFP Server. Click **Browse** to select the new firmware in your storage and then click **OK**, the firmware will be updated in several minutes.

Please note that if you have started upgrading firmware, you have to follow all of the upgrading steps, or the MFP Server won't return to normal configuration.

LPR Printing

LPR Printing (Line Printer Remote technology) allows users to connect to MFPs or printers via TCP/IP for print sharing. Computers running Windows 98SE, ME, NT 2000 XP or 2003 operating systems can use the protocol to share printing on the network. This MFP Server supports LPR printing by default.

To configure the LPR setting in Windows 2000/XP/2003:

1. Click **Start**, choose **Settings** and select **Printers and Faxes**.

2. Click **Add a Printer**.

3. The **Add Printer Wizard** is displayed. Click **Next**

4. Select **Local Printer attached to this computer** and click **Next**.

5. Choose **Create a new port and Standard TCP/IP Port**. Click **Next**.

6. Please ensure that the MFP Server and the MFP or Printer are turned on and connected to the network correctly before continuing. Click **Next**.

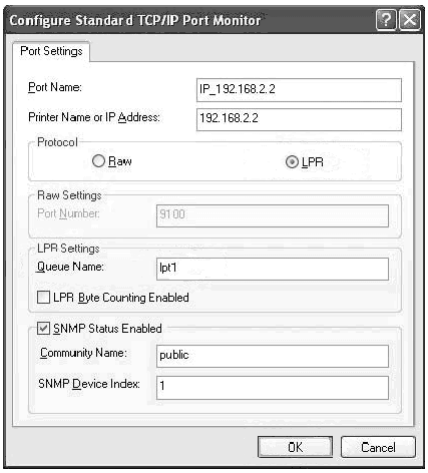
7. Enter the IP Address of the MFP Server in the **Printer Name or IP Address** field, as shown in Figure 1- . Click **Next**.

8. Select **Custom** and click **Settings**. When you have finished the settings at step 9, click **Next** to continue.

9. Select **LPR** and enter **lpt1** in the **Queue Name**, click **OK**. By default, the queue name of the MFP Server is **lpt1**.

10. Click **OK**, and **Next**, once you return to the **Add Standard TCP/IP Printer Port Wizard**.

11. Select a suitable printer manufacturer and the printer model and click **Next**. If your printer is not in the list, click **Have Disk…** to install the printer driver. Following installation, the printer model will be added to the list.



12. Choose whether or not to set the printer as the default printer. Click **Next**.

13. Once you have added the network printer to the PC successfully, the printer information will be displayed. Click **Finish**.

IPP Printing

IPP (Internet Printing Protocol) Printing provides a convenient way of printing remotely using TCP/IP. The MFP Server supports IPP printing in Windows 2000/XP/2003 by default. Using IPP printing, you can share the printer with all PC's that can access the MFP Server by IP. The MFP or printer can also be shared with users via the Internet.

System Setup - Server Side

No server side settings are required, other than to ensure that the MFP Server has the correct IP settings. If you want to share the printer(s) with users via the Internet, a real IP Address needs to be set for the MFP Server. Also, please ensure that nothing is blocking the IPP protocol (gateway, router or firewall) if installed on your network.

System Setup - Client Side

To configure the MFP server on the client side, follow the **Add New Printer** procedure:

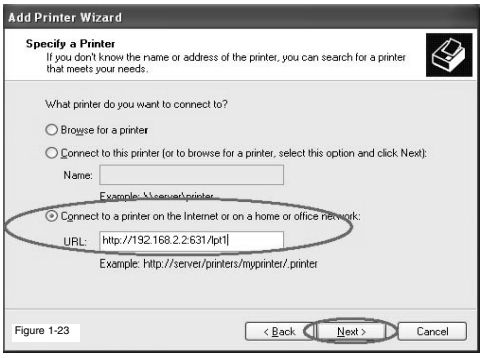
1 Click **Start**, choose **Settings** and select **Printers and Faxes**.

2 Click **Add a Printer**.

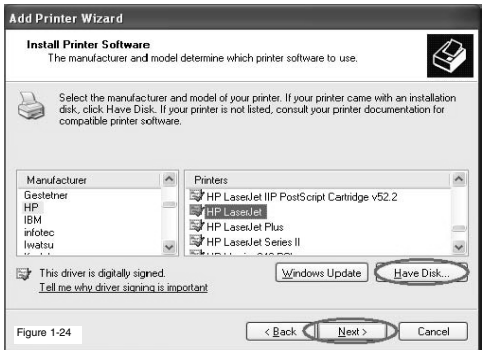
3. Once the **Add Printer Wizard** is displayed. Click **Next**.

4. Select **A network printer, or a printer attached to another computer**. Click **Next**.

5. Select **Connect to a printer on the Internet or on a home or office network** and enter the URL of the MFP Server. The URL format is **http://IP:631/Port Name**. The IP address should be the MFP Server's IP address. The standard port designation for the IPP standard is **631**. **Port Name** is the port name of the MFP Server to which your printer is connected. The default port name is **lpt1**. One example of the URL is **http://192.168.2.2:631/lpt1**. After entering the URL of the MFP Server, click **Next**.



6. Select a suitable printer manufacturer and the printer model and click **Next**. If your printer is not in the list, click **Have Disk…** to install the necessary driver. After installation, the printer model will be added to the list.



7. Choose whether or not to set the printer as the default. Click **Next**.

8. Once you have added the network printer to the PC successfully. The printer information will be displayed in the window. Click **Finish**.

MFP Server Installation in Windows 98SE / ME / NT

PM1115UMF supports the TCP/IP network protocol, as well as IPP and LPR printing protocols, and can be used as a normal print server when used with Windows 98SE, ME, NT, 2000, XP, 2003, Unix/Linux and MAC OS. The IPP printing protocol can be used with Windows 2000/XP/2003 operating systems. The LPR printing protocol can be used in Windows 98SE/ME/NT/2000/XP/2003, Unix/Linux and MAC OS.

This section will introduce how to install the MFP Server to act as a print server in Windows 98SE/ME/NT.

Before you start, you should have:

- A computer using Windows 98SE/ME/NT operating system
- The TCP/IP network protocol installed on the PC

Software Installation Procedure

Please note: The following are the installation steps in Windows 98SE. To install MFP Server in Windows ME/NT, the procedures are similar.

1. Insert the drivers CD. The **Autorun.exe** program should be executed automatically. If not, please locate and run Autorun.exe manually from CD-ROM drive root directory.

2. When the **Setup MFP Utilities** screen is displayed, Click **MFP Utility** on the left side of the screen, then specify **English Version**.

3. A message will appear, reminding you that the MFP Server will only support print sharing functions for a standard printer, since the operating system of your computer is Windows 98SE/ME/NT. Click **OK** to proceed.

4. The **MFP Server Utilities - InstallShield Wizard** will be displayed. Click **Next**.

5. Click **Next** to install the MFP Server utilities in the default folder or click **Change** to specify the destination folder where you would like to install the MFP Server utilities.

6. Once the MFP Server Utilities have finished installing, the **Configuration** screen will appear. If you want to configure the MFP Server, please click **Next**, or you can select **No, I will configure the MFP Server later** and click **Next** to complete the installation.

MFP Server Configuration

1. The MFP Server List will auto search the MFP Servers in the network, as depicted in **Figure 1-25**. Select the MFP Server you want to setup and click **Next** to continue.

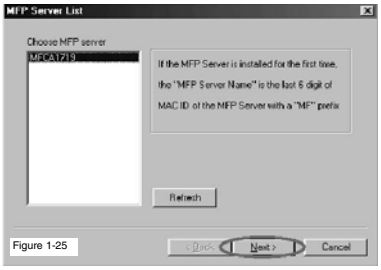


Figure 1-25

2. Set the **Alias Name** and the MFP Server as illustrated in **Figure 1-26**. Click on **Next**.

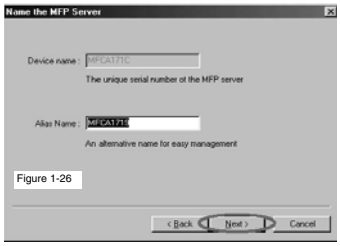


Figure 1-26

3. Setup the IP address of the MFP Server and click **Next**.

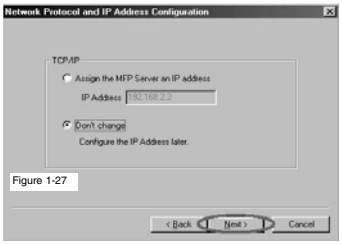


Figure 1-27

4. As shown in **Figure 1-28**, all information entered will be displayed. Please review for accuracy. If corrections are required, please click the **Back** button, or click **Finish**.

5. Click “Finish” to complete the installation.

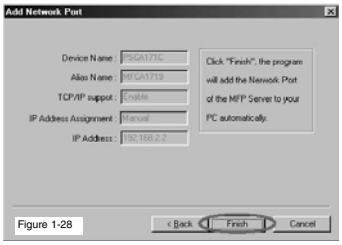


Figure 1-28

Server Utilities

Once installation has completed, there will be three utilities displayed in the MFP Server's Program folder:

Network Port Setup – Allows users to add or remove the MFP Server printer port to or from the client computer.

During the MFP Server's installation procedure, the system will automatically search for all MFP Servers on the network, and add the printer port of the MFP Server you have selected to the user computer (see **Figure 1-29**).

If you have just installed another new MFP Server on the network, you must run this program first. This program will search for new MFP Servers and conveniently allow you to add the new network printer port to your computer. Perform the standard **Add Printer** procedure, which will allow print directly from the printer through the newly installed MFP Server.

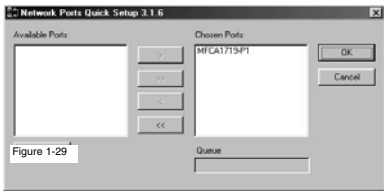


Figure 1-29

Please note that the Network Port Setup Utility can only detect and configure MFP Servers within the same network; it cannot search or configure the MFP Servers on other subnets across network segments

Server Configuration – Allows you to configure IP Address, network protocols and other advanced functions.

Uninstall – Program designed to remove all installed Print Server software.

Adding a printer in Windows 98SE/ME/NT

After adding a Network Port from the MFP Server to your computer, you can follow the procedure described below to add a printer to the Window. Please note that the steps below are based on usage with Windows 98SE. The steps for Windows ME/NT Operating Systems are similar.

1 Click **Start**, choose **Settings** and select **Printers**.

2 Click **Add Printer**.

3 The **Add Printer Wizard** is displayed. Click **Next**.

4. Select **Local printer** and click **Next**.

5. Select a suitable printer manufacturer and the printer model and click **Next**. If your printer is not in the list, click **Have Disk…** to install the driver of the printer. After installation, the printer model will be added to the list.

6. Choose the suitable **Print Server Network Port** and click **Next**.

7. Please enter the new name for the printer or click **Next** to keep the default printer name.

8. Once the next screen appears, please select **Yes (Recommended)** when asked if you want to print a test page, and click **Finish**.

9. The printer drivers will now be installed. Once installation is complete, the printer will be displayed in **Printers**.

MFP Server Installation in Unix

Introduction

The MFP Server is available for TCP/IP printing using the Unix LPD (Line Printer Daemon) protocol. The LPD protocol is based on the BSD version of Unix, and is supported under most versions of Unix.

This chapter explains how to configure the MFP Server for TCP/IP operation under the Unix operating system, and how to modify configuration files on your Unix system to allow printing to the MFP Server. The configuration examples in this manual follow the syntax for BSD based Unix systems. Please refer to the related system documentation for the correct syntax of your system(s).

To configure the MFP Server for LPD printing:

1. ***Enable the MFP Server's TCP/IP Support -*** By default configuration, the MFP Server supports TCP/IP. However, this can be re-configured using the MFP Configuration program.

2. ***Set up the MFP Server's IP address*** - The MFP Server must have a unique IP address in order for it to be recognized by the network.

   You can set up the IP address on Unix systems using either DHCP (Dynamic Host Configuration Protocol)or Bootstrap Protocol (BOOTP). The MFP Server will use these methods to obtain the IP Address automatically, if the IP Address is configured as Auto (0.0.0.0).

   DHCP

   There are many Unix systems that support the DHCP protocol, and the procedures to configure the DHCP server database are different. Please refer to the manual of Unix for the way to use different DHCP Server. It is highly recommended that the DHCP server should be located on the same network as the MFP Server.

   BOOTP

   If you have the BOOTP daemon (**bootpd)**, running on your UNIX system that is accessible by the MFP Server, you can use the BOOTP protocol to set up the IP address of the MFP Server. We recommend that the BOOTP server should be located on the same subnet as the MFP Server. If you use Network Information Services (NIS) in your system, you may need to rebuild the NIS map with the BOOTP services before

doing the following BOOTP configuration. To rebuild the NIS map, please refer to your system documentation.

To configure the IP address data for the BOOTP server, you will need to log in the host of BOOTP server as the super-user (root). Perform the following steps to add address entries,

1. Optionally, assign a name corresponding to the MFP Server's IP address. You can add this address to the /etc/hosts file, by adding a line such as:

203.66.191.12 pserver

2. Add an entry to the host's **/etc/bootptab** file, similar to the following:

hostname:
:ht=1:
:ha=MFP_Server_ethernet_address:
:ip=MFP_Server_ip_address:

(Please note: Lines should be indented with tabs)

Where hostname is the device name of a MFP Server, the ht=1 tag specifies the hardware type is Ethernet, the ha= tag specifies the Ethernetaddress of a MFP Server, which is the Node ID located on the MFP Server.The **ha** tag must be preceded by the ht tag. The ip= tag should correspond with the IP address you want to assign to the MFP Server.For example, a MFP Server with the following configuration: **Node ID: 0000B4010101** (this implies Ethernet address is 0000B4010101),

IP address: 203.66.191.12

The entry for this MFP Server in the /etc/bootptab file should be:

MF010101:\ :ht=1:\ :ha=0000B4010101:\ :ip=203.66.191.12:

3. ***Verify MFP Server's IP Address*** - To verify that the MFP Server is responding to the newly assigned IP address, use the following PING command:

ping ip-address

4. ***Configure remote LPD printing on the host*** - The procedure you use to configure your Unix host(s) to allow printing to your network remote MFP Server varies between different varieties of Unix. The procedure below can be used for Unix variants that are related to BSD Unix, such as SunOS or Linux. For other versions of Unix, consult your system documentation, keeping in mind that:

1. The MFP Server should be treated as a BSD networked MFP Server host.

2. The host name should be the name (or IP address) that you have assigned to the MFP Server.

3. The printer name (or queue name) on the remote host should be **lpt1**, **lpt2** or **lpt3**, the name of the printer port on the MFP Server.

To configure your Unix host for printing, you will need to perform the tasks below, logged in as the super-user (root):

1. Optionally, assign a name corresponding to the MFP Server's IP address. You can add this address to the **/etc/hosts** file, by adding a line such as:

203.66.191.186 pserver

2. Create a spool directory for the printer in the same directory where spool directories are normally kept on the machine, such as **/var/spool** or **/var/spool/lpd:**

```
mkdir /var/spool/lpd/pserverd
chown daemon /var/spool/lpd/pserverd
chgrp daemon
/var/spool/lpd/pserverd
chmod 775 /var/spool/lpd/pserverd
```

3. Add an entry to the host's **/etc/printcap** file, similar to the following:

```
printer-name:\
:lp=:\
:rm=203.66.191.186:\
:rp=lpt1:\
:lf=/var/spool/lpd/pserverd.log:\
:sd=/var/spool/lpd/pserverd:\
:mx#0:
```

Lines should be indented with tabs. More than one printer name can be used, with variants separated by vertical bars (name1|name2).

The **rm=** entry should correspond to the IP address you have assigned to the MFP Server. You can also use a host name if you have assigned one in the **/etc/hosts** file.

The **sd=** entry should correspond to the spool directory you created in the previous step.

The **rp=** entry should correspond to the port name of the remote printer. The values should be one of **lpt1**, **lpt2** or **lpt3** depending on the printer port.

The MFP Server should now be available for printing from your Unix host.

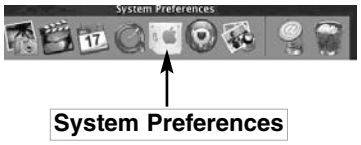
5. ***Print a test page***.

MFP Server Installation in Mac OS

LPR Printing (Line Printer Remote technology) allows Macintosh computers to connect to MFPs or printers via TCP/IP. LPR Printing can be set up on any Macintosh computer with OS version 9.x above.

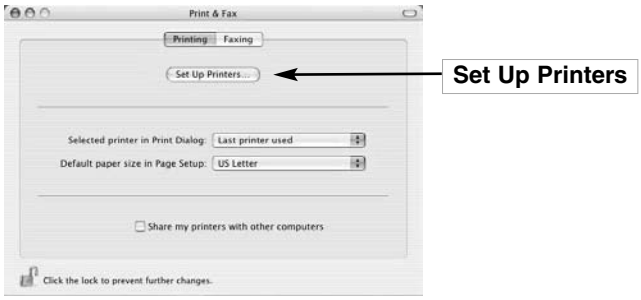
To enable LPR Printing on a Macintosh, please follow the procedures below:

1. On the Desktop, click "**System Preferences**".

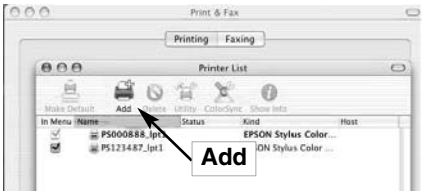


2. Click **Print & Fax**.

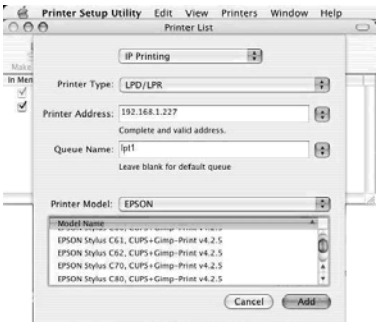
3. From the **Print & Fax** screen, click **Set Up Printers…**



4. Click **Add** to add the new MFP Server through TCP/IP.



5. Enter the **Printer Type**, **Printer Address** and **Queue Name** and select the **Printer Model** to setup the MFP Server. Click **Add** to continue.



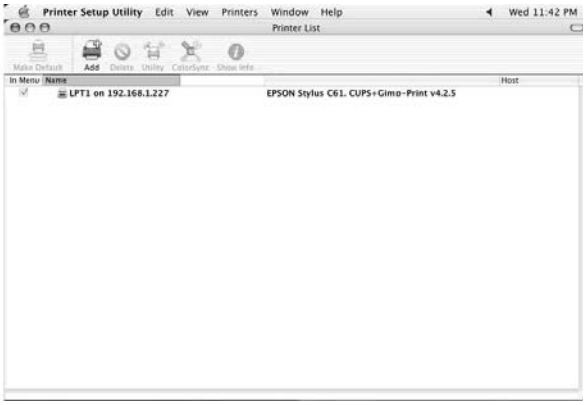
Printer Type: LPD/LPR

Printer Address: Input the IP Address of the MFP Server

Queue Name: The queue name of the MFP Server is **lpt1**.

Printer Model: Select the MFP or Printer Model that is attached to the MFP Server.

6. Once the MFP Server is installed completely, you can see it in the **Printer List**.



7. Print a test page to check whether the MFP Server is installed successfully.

Specifications

CPU	RISC CPU
Flash	512KB NOR Flash
RAM	2MB SDRAM
USB Port	USB 2.0 Type A x 1
LAN Port	10/100M UTP Port x 1 (Auto-MDI/MDI-X)
Power	7.5V DC, 0.5A Power Adaptor
Dimensions	20(H) x 58(W) x 75(D) mm
Temperature	0~55°C
Humidity	10~90% (Non-Condensing)
Certification	FCC Class B, CE Mark, C-Tick

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