

CONFIGURING A KIP FOR TCP/IP  
PRINTING WITH MAC AND UNIX





## *Introduction*

Mac and Unix printing to the KIP Monochrome and Color systems is accomplished via standard LPD/LPR printing. On Mac systems, a standard Postscript output is directed to queue name on the KIP IPS. On Unix systems, the application responsible for print output can be directed to transmit any of the compliant file formats to the queue name of the KIP IPS. On the KIP IPS, each queue name is configured for several print options such as scaling, folding/stamping, copy count, and media type.

## *System Requirements*

Current Macintosh systems such as OSX are compatible with LPD/LPR output and it is mainly necessary to verify the file format exported to file (TIF, JPEG, PDF, EPS/PS) for use in PrintNET or file data transmitted via LPD/LPR (usually Postscript) to the KIP IPS.

Unix systems mainly require that the application output any of the accepted formats that the KIP systems are compatible with including HPGL, HPGL/2, HP-RTL, Monochrome TIF and Cals Group 4, TIF (Grayscale or Color), JPEG, PDF, and EPS/PS.



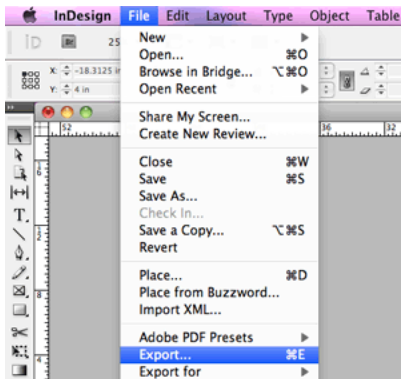
## Configuring a TCP/IP Desktop printer in Macintosh OS X

There are two main methods of printing from Macintosh based systems to KIP Monochrome and Color systems.

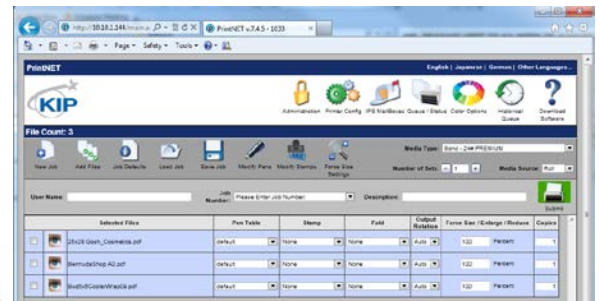
### Method #1 – Print to file, then use PrintNET

In the first method, the operator uses the Macintosh application to generate an acceptable file format (PDF, PS/EPS, Jpeg, TIF etc) and then uses PrintNET via the Macintosh web browser to send the print data. No additional setup or configuration is required on the Mac or IPS system. Simply export to an acceptable file format and open the browser on the Mac and type in the IP address of the KIP system. Add the files to print and use any of the following print parameters:

- Copy Count
- Change Page Size via Percentage or Force Size
- Color vs Monochrome setting (for KIP Color systems)
- Collated set
- Recall and reprint
- Save job/recall job
- KIP Track Accounting data
- Manage the Print Queue (admin only)
- Alter the Printer settings (admin only)



On Mac graphics application:  
Export file to local drive.  
(TIF,PDF,Jpeg,EPS/PS)



On Mac – use Safari or other  
web browser to access KIP  
PrintNET via IP address of  
printer, choose files and Submit  
a job

### Method #2 – Direct Printing from Mac application to the KIP IPS

In this method, the operator will use the Macintosh systems built-in Postscript output to transmit Postscript data via LPD/LPR to a specific queue name located on the IPS. The Macintosh system

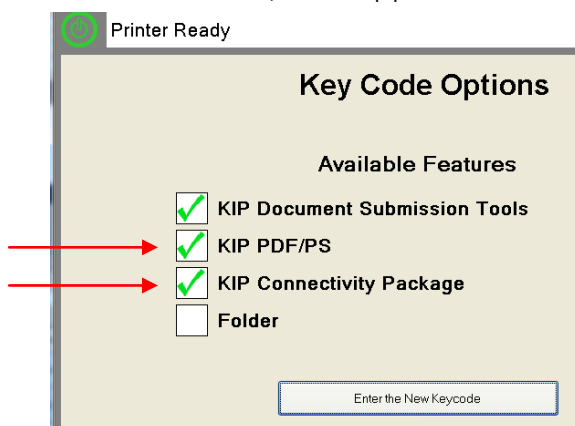
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can generate large format page sizes based on reading the page sizes from the KIP PPD (Postscript Printer Definition File). Each queue name on the IPS can be strictly setup for a series of parameters:

- Copy Count
- Percentage/Force Size
- Color/ Monochrome

The setup process will require an admin or technician to access the KIP IPS and also the knowledge of adding the KIP PPD to the Mac system. Each LPD/LPR Queue can contain 1 set of print parameters configured by the admin and cannot be altered from the Macintosh based system prior to printing. **Note:** this is the least flexible method of printing but it does allow direct printing from the application. **Note:** for the KIP Color systems – it is necessary to purchase both the “KIP PDF/PS” option for Postscript printing and the “KIP Connectivity Package” option keycodes (KIP Item # DIGMACLPR-C7800) that supports LPD/LPR based printing.



## Setup overview

1

MAC – setup the Mac system with KIP PPD and point it to an LPD/LPR Printer to the KIP IP address and Queue name such as KIP, IPS, IPS1, IPS2, or IPS3.

2

KIP IPS (at the printer) – configure the Print Parameters for LPD/LPR Queue names: KIP, IPS, IPS1, IPS2, or IPS3.

## Printing overview

1

Mac – print to the Mac printer object configured for one of the Queue names.

2

KIP IPS (at the printer) – by reading the LPD/LPR Queue name in the header, the IPS will automatically use the configured Print Parameters to convert and print the PS data coming from the Mac system.

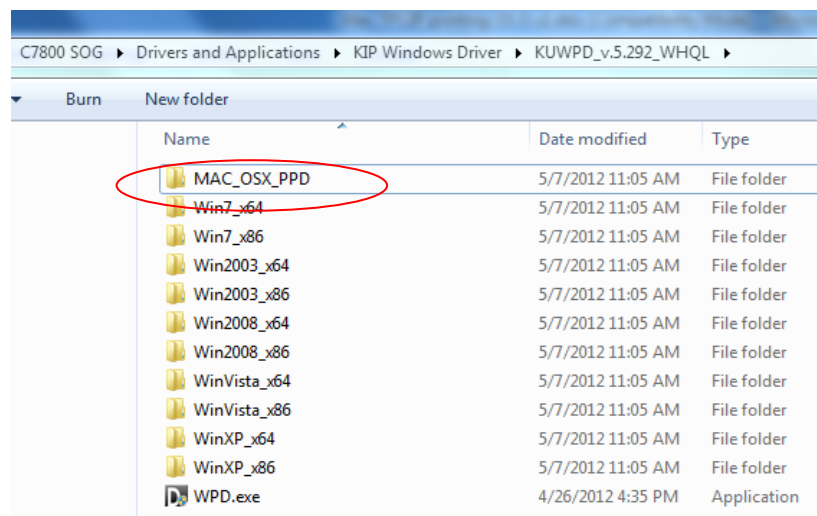


## Method #2 – Macintosh Printer Setup

The following steps will walk you through the procedure for setting up a Macintosh system for TCP/IP printing. These steps apply to Macintosh OS X:

Adding the KIP PPD to the Macintosh system

1. Locate the KIP PPD (Page Definitions) stored with the Windows Driver in the directory MSC\_OSX\_PPD either on the KIP Software Operation Guide Disk or contained in the Windows Driver installer when downloaded from the IPS via PrintNET (IPS address of the printer). Place this on a flash drive or copy it to the desktop of the Mac system.

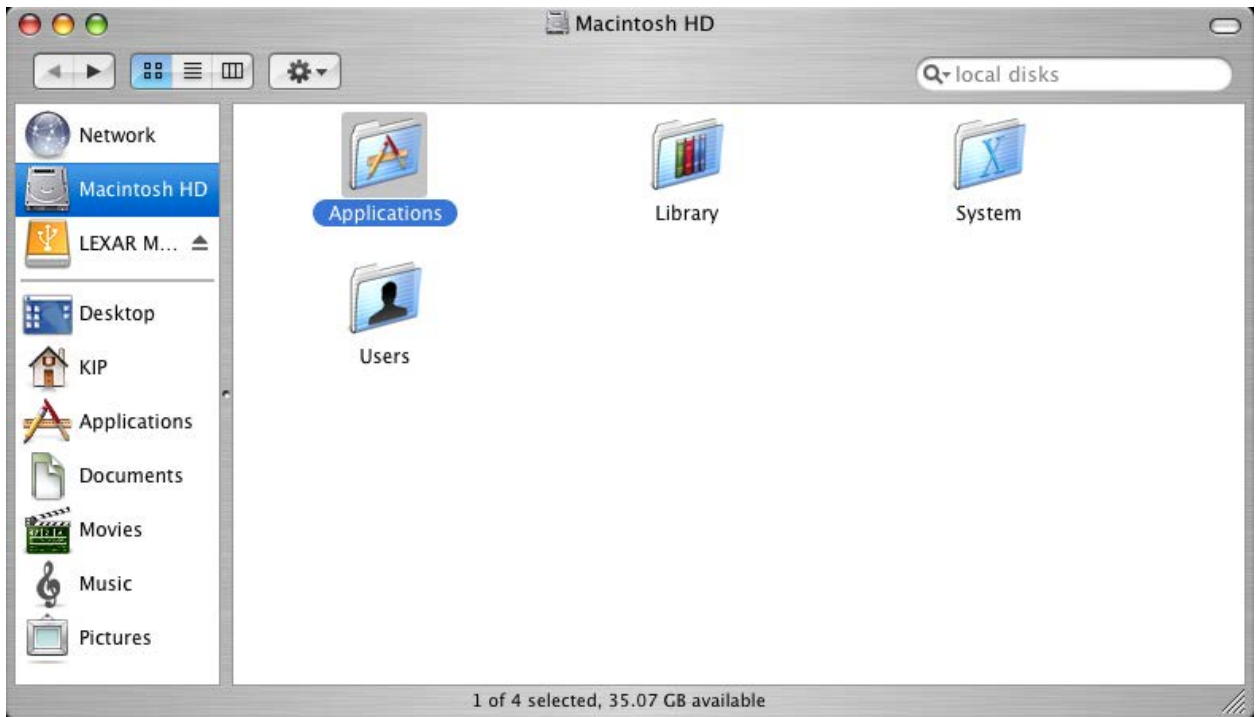


2. On the desktop open the Mac hard drive



3. Once the hard drive is open select the "Applications" folder

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4. Once the Applications folder is open select the "Utilities" folder



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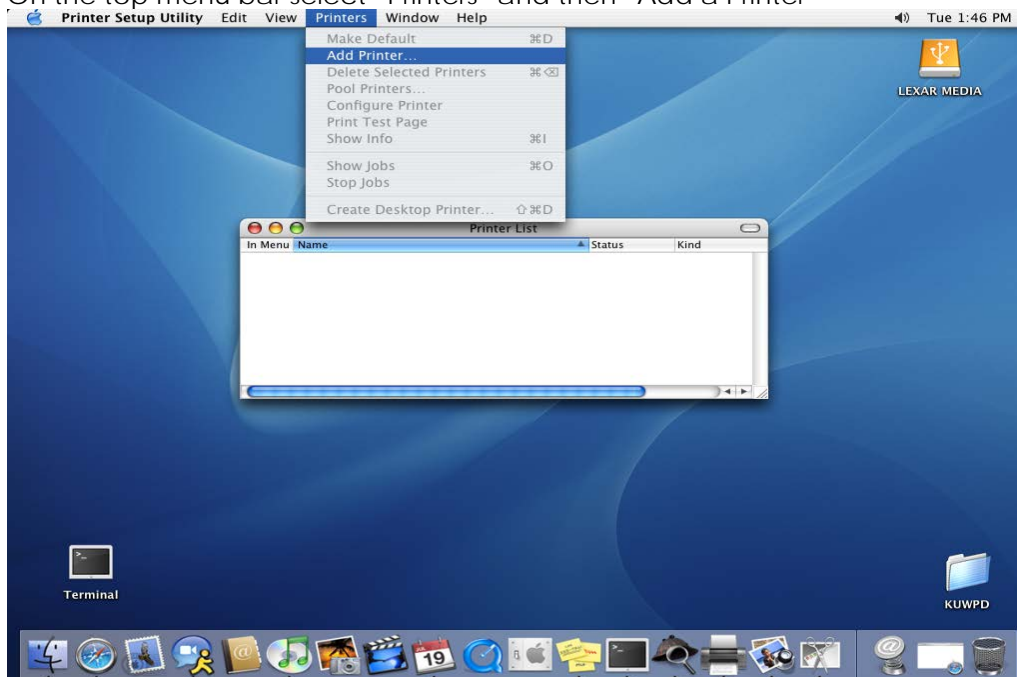


5. Once the Utilities folder is open find the "Printers Setup Utility"



Add a Macintosh Printer

6. On the top menu bar select "Printers" and then "Add a Printer"



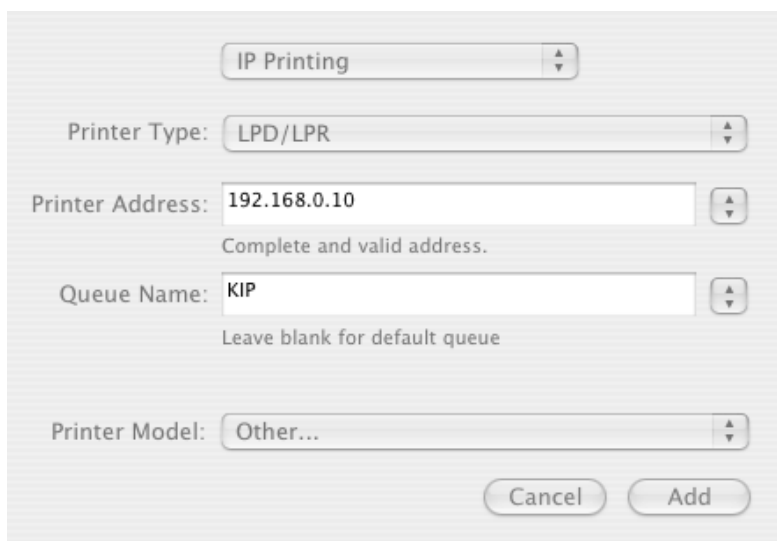
7. On the next screen you will need to set the following:

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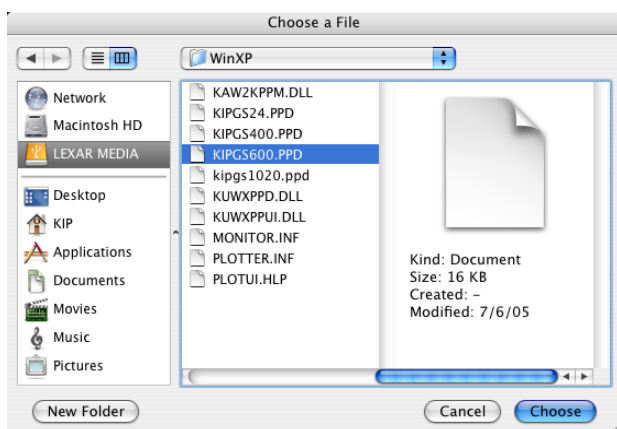
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- a. In the first pull down select "IP Printing"
- b. In the second "Printer Type" pull down select LPD/LPR
- c. In the third area "Printer Address" set this to your printer IP Address
- d. In the fourth area "Queue Name" set the queue name to KIP, IPS, IPS1, IPS2, or IPS3  
(these are the default Queue names already created on the IPS – configuration of the Print Parameters for each Queue name is detailed below)
- e. In the fifth area "Printer Model" select "Other"



8. Locate the desired .PPD file (ex. KIP600.PPD) select "choose"



9. Select "Add"

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IP Printing

Printer Type: LPD/LPR

Printer Address: 192.168.0.10  
Complete and valid address.

Queue Name: KIP  
Leave blank for default queue

Printer Model: KIPGS600.PPD

Cancel Add

10. You should now see the printer you just set up in your Printer List

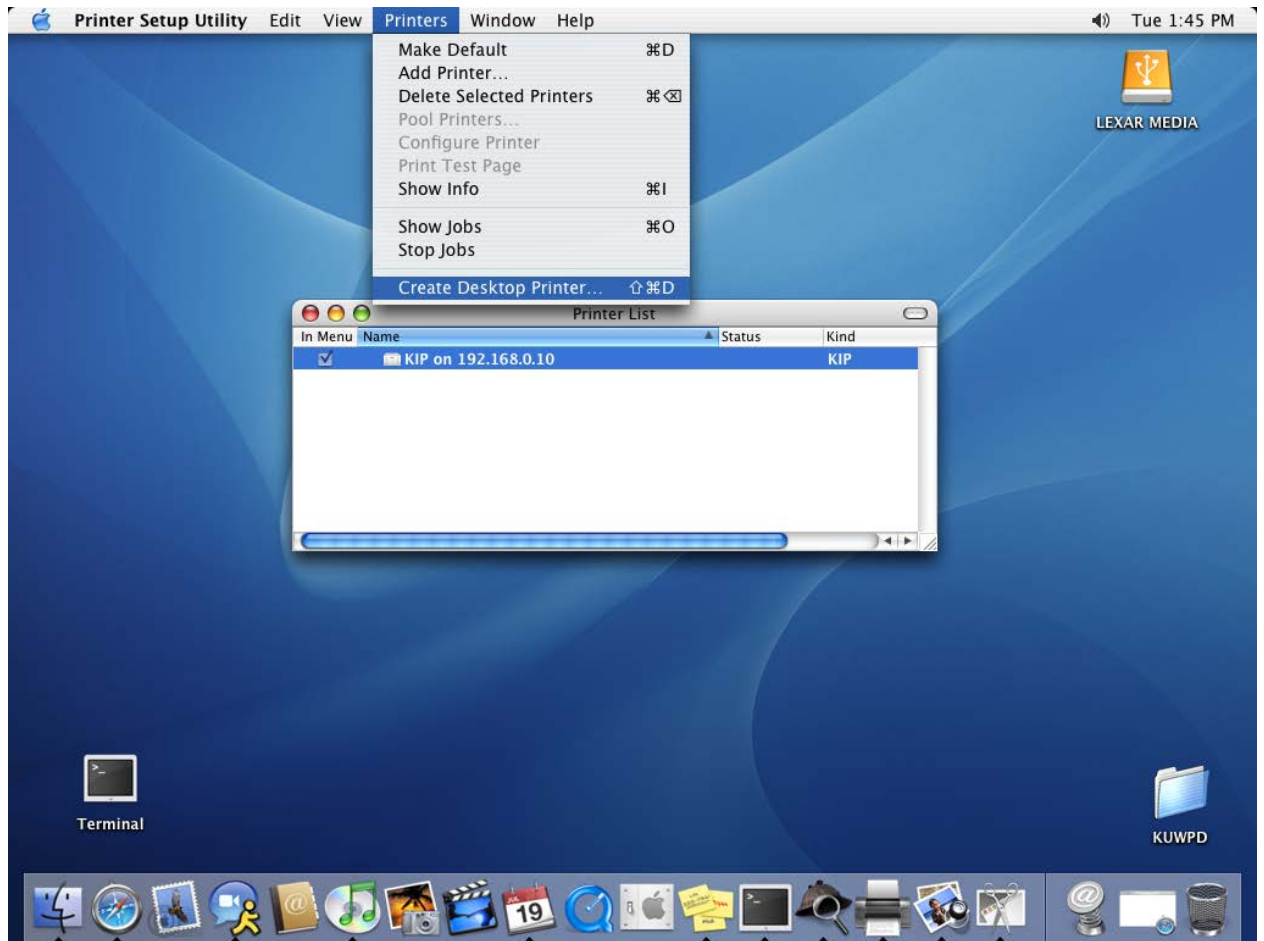
In Menu	Name	Status	Kind
<input checked="" type="checkbox"/>	KIP on 192.168.0.10		KIP

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Create a Desktop Print on the Macintosh

11. Go to the menu bar on top and select Printers then select "Create Desktop Printer" from the pull down choices.



Once the above steps are completed on the Macintosh system, it is necessary to configure the Print Parameters for each Queue Name that will be used. This is completed by a qualified technician via a remote session using WinVNC to remote into the system via the IP address of the IPS.

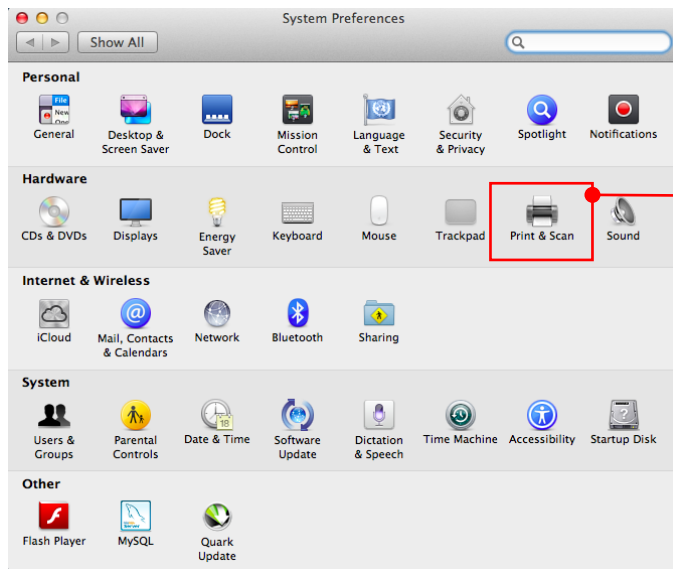


## Configuring Macintosh OS X Mountain Lion

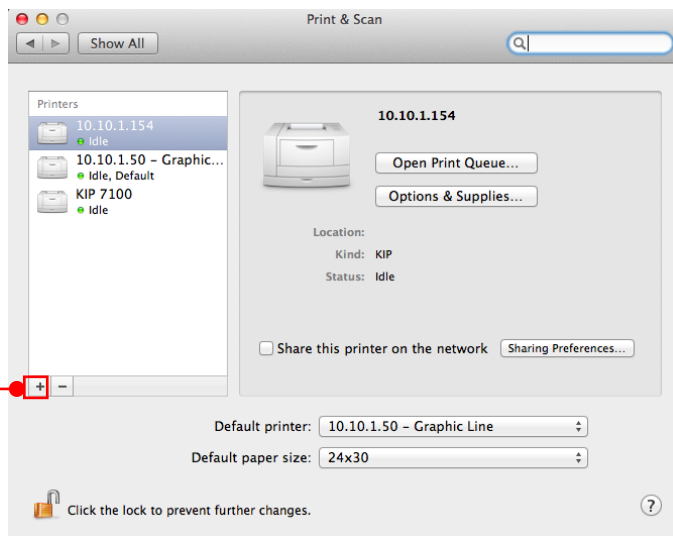
1. On the desktop open the Settings folder



2. When the Systems folder select the Print & Scan Icon



3. Once the Print & Scan folder opens select the + to add a printer.

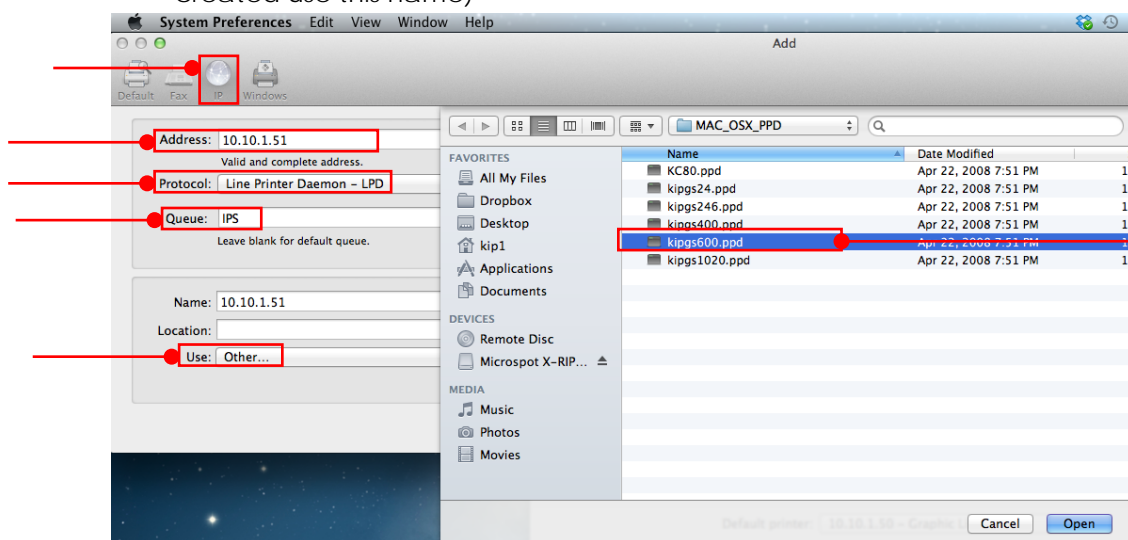


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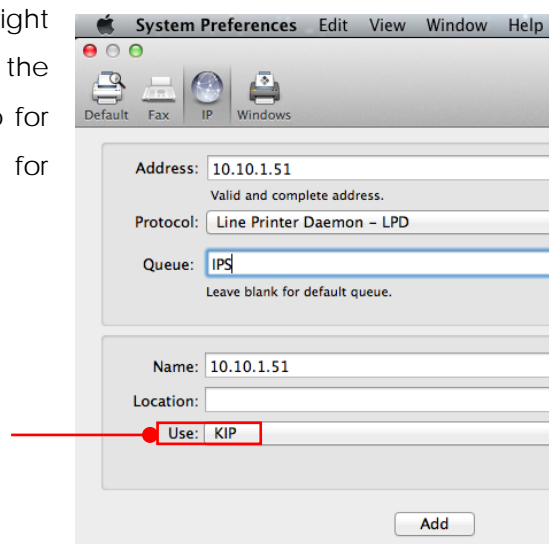
4. Select the IP Tab at the top of this next screen and enter in the correct information for the printer to be connected.

- Address – IP address of the KIP
- Protocol – Line Printer Daemon – LPD
- Queue – KIP Printers will by default have a Queue of IPS (If a different Queue was created use this name)



5. Under Use: Select the drop down arrow to the right and select "Other" and browse to the location of the KIP Mac (PPD) Drivers and select the kipgs600.pp for the Monochrome KIP Printers and the KC80.ppd for the KIP Color systems)

6. Select Open

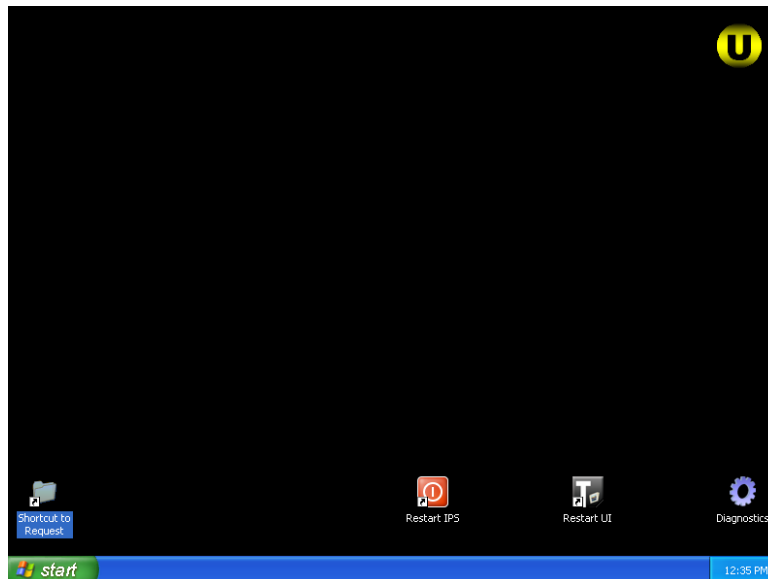




## *Configuring the Print Parameters for the Queue Name on the KIP IPS for Mac and Unix printing*

The KIP IPS stores the Job Ticket and Print Parameters for each Queue Name. In order to access and configure the Queue Names on the IPS, it is necessary to temporarily shut down the IPS Touchscreen UI to access the IPS Unattend Queue View software. This can only be accomplished by a qualified technician. Once the Touchscreen UI is shut down, the menu for the IPS Unattend software allows for configuring the Print Parameters of each LPD/LPR Queue Name.

1. Exit the IPS Touchscreen UI (by qualified technician only).
2. If the IPS Unattend UI is not obviously present it is likely running in a minimized fashion. Maximize the IPS Unattend by selecting the yellow U. If it is not running it can be accessed in the Start or Diagnostics menus.

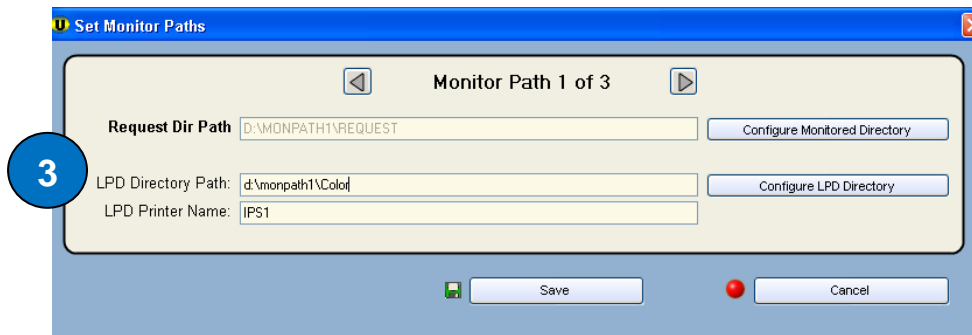
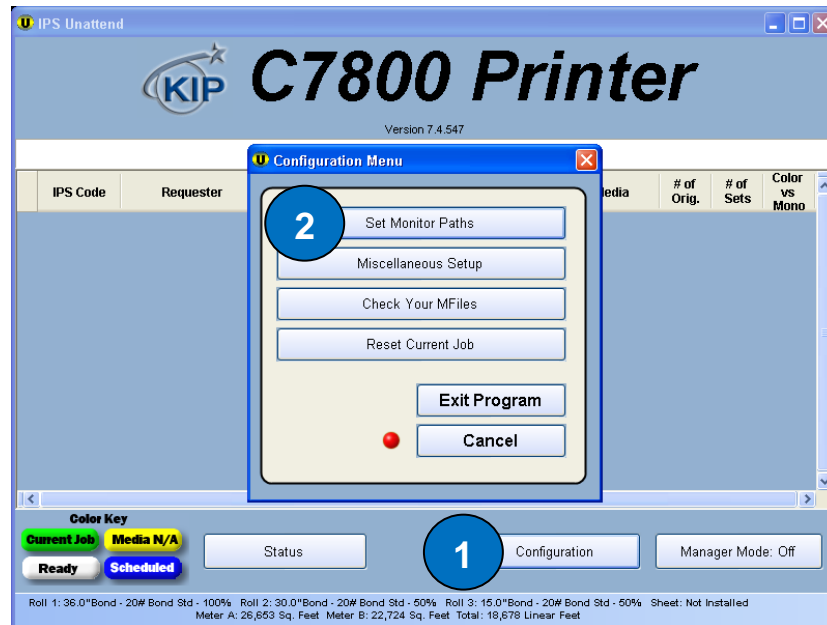


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Create a folder for the Print Parameters:

- 1 Select "Configuration"
- 2 Select "Set Monitor Paths"



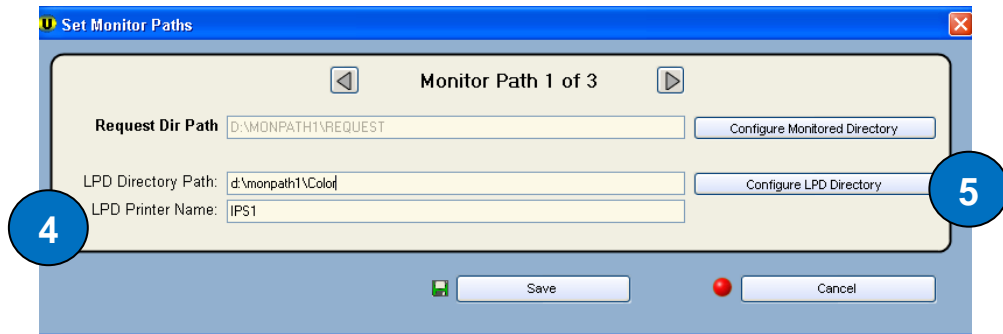
Note the section that contains the two fields for LPD configuration.

- 3 The "LPD Directory Path" entry is used for storing the Print Parameters; therefore the name you type should always be a local drive and directory on the IPS such as "D:\monpath1\Color" or other directory name. The IPS Unattend UI will automatically create the folder based on what you type into this entry.



### 3. Enter the LPR/LPD Queue name

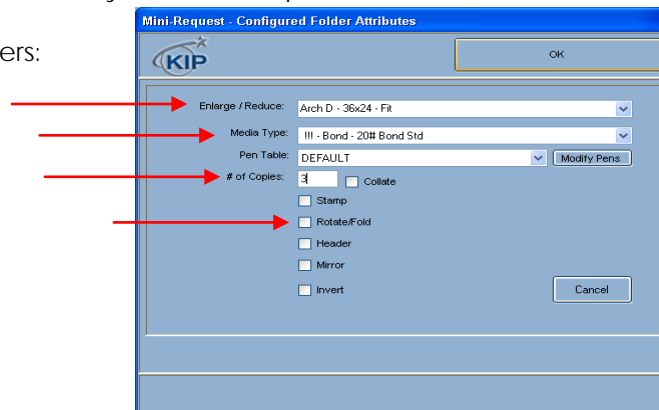
The "LPD Printer Name" entry on the IPS must match the "Queue Name" from the Mac system. The list of IPS Queue Names already on the system can be viewed in the Windows Printers section on the IPS; they are defaulted to KIP, IPS, IPS1, IPS2, and IPS3. Type in one of these 5 queue names. Note: These are NOT shared printers, they are only used for LPR based printing.



### 4. Configure the Print Parameters for the LPD Printer Name.

Choose **5** "Configure LPD Directory" to set the Print Parameters. The items configured here will be used every time a file is printed to this LPD Printer Name.

Print Parameters:



Enlarge/Reduce: set to a Percentage or one of the Force Size schemes in this list. This setting will always be used when printing to the Queue Name/LPD Printer Name.

Media Type: set to a Media Type that will always be used when printing to the Queue Name/LPD Printer Name.

# of Copies: set the number of copies that will always be used with this LPD Printer Name.

Rotate/Fold: set the rotation and KIP Folding parameters that will always be used with this LPD Printer Name.

### Configure the Color Printing Parameters

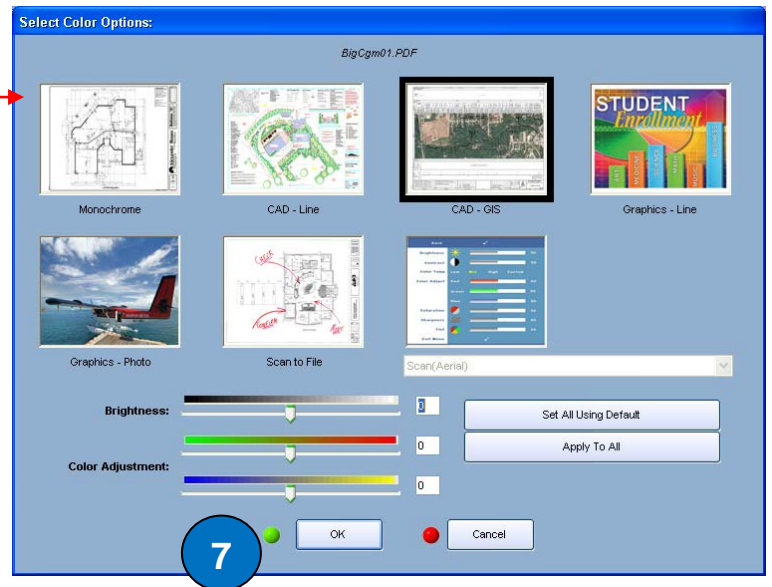
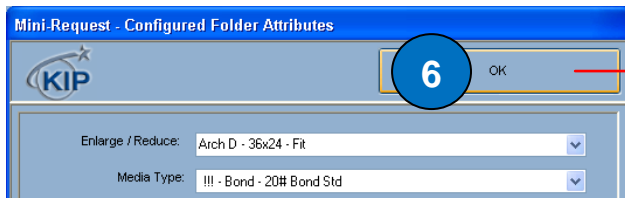
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## 5. Configure the Color Parameters (for KIP Color Systems)

Select **6** OK and then a Color Options window will show and allow for choosing one of the color presets such as: CAD-Line, CAD-GIS, etc that will be assigned to the LPD/LPR Queue name. The settings for these buttons are configured in PrintNET.




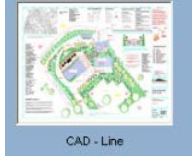

## Example LPD/LPR Names and Configurations

Separate LPD/LPR Printers and Queue Names (KIP, IPS, IPS1) should be used for different types of printing. For example:

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Image Type	LPD/LPR Queue Name on Mac	LPD Printer Name on KIP IPS	Color Option selection
Monochrome	KIP	KIP	
Color Technical	IPS	IPS	
Color Graphics	IPS1	IPS1	

Once **7** OK is selected, the LPD Directory Path is created and a job ticket stored in this directory. Each time file data arrives via LPD/LPR with the Mac based Queue Name in the file header, the IPS Unattend will match it to the LPD Printer Name and use the configured Print Parameters to print that file. Be sure to reboot the system or restart the Touchscreen UI once all steps have been completed.



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