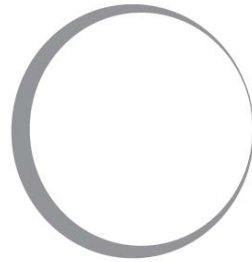


**XANTÉ**



**ILUMINA**

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## Network and Configuration Guide

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Ilumina Network and Configuration Guide 1

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## **2 Ilumina Network and Configuration Guide**

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**Colophon**

This manual was written using Adobe InDesign, Adobe Acrobat, Adobe Photoshop, Adobe Illustrator, and Microsoft Word. The typefaces for the main body of the manual are Times New Roman, Arial, Wingdings 3, and Symbol.

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# Chapter 1 - Introduction

## Introduction



The network addresses used in this manual are shown for example only. Network addresses used in your installation must be generated from your network administrator.

The XantéLAN Internal Print Server is a fast 100BASE-T/10BASE-T network interface.

This network print server supports IEEE 802.2, IEEE 802.3, Ethernet-II, and SNAP, and can detect those frame types automatically. It supports major protocols such as TCP/IP, IPX/SPX (NetWare), EtherTalk (Mac), and NetBEUI (Windows).

The print server has a number of security features, including SSL/TLS, IP Filtering, disabling unused protocols, etc. See chapter 4 for more information.

Password protection ensures that the print server is safe from unauthorized changes in settings. You can also restrict access by disabling network services, protocols, and ports you are not using. You can limit access to specific authorized IP addresses as well.

The STMP feature allows you to have an E-mail sent to designated addresses when certain errors occur.



Change the emulation in the Illumina Menu settings to Auto or PS before printing the self-diagnostic test and settings.

## Manual Conventions

The following conventions are used in this manual:



indicates that you need to press the Return key on a Macintosh or the Enter key on a PC.



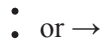
indicates additional or emphasized information to supplement the main text.



indicates caution and instructions that must be followed to avoid damage to files or equipment.



indicates danger and warns that instructions must be followed exactly to avoid personal injury.



indicates the path for a file or folder and links procedure steps.



indicates variable information such as the Ilumina's name.

## Chapters

This book is divided into the following chapters:

- Chapter 1—Introduction
- Chapter 2—Configuring The Print Server
- Chapter 3—Utilities
- Chapter 4—Security Features
- Chapter 5—Printing from Microsoft Windows
- Chapter 6—Printing Using Macintosh
- Chapter 7—Troubleshooting
- Appendix—The Ilumina Menu

## Print Server Specifications

Frame types	<ul style="list-style-type: none"><li>• IEEE 802.2</li><li>• IEEE 802.3</li><li>• Ethernet-II, SNAP, AUTO</li></ul>
Network interface	<ul style="list-style-type: none"><li>1000BASE-T</li><li>• 100BASE-TX</li><li>• 10BASE-T</li></ul>

Network protocols	<ul style="list-style-type: none"> <li>• TCP/IP <ul style="list-style-type: none"> <li>– Network layer: ARP, RARP, IP, ICMP, PnP</li> <li>– Session layer: TCP, UDP</li> <li>– Application layer: PR, FTP, TELNET, HTTP, IPP, BOOTP, DHCP, SNMP, DNS, SMTP, POP3</li> </ul> </li> <li>• IPX/SPX (NetWare) <ul style="list-style-type: none"> <li>– Remote printer mode (up to eight file servers and 32 queues)</li> <li>– Print server mode (up to eight print servers)</li> <li>– Encrypted password supported in print server mode <ul style="list-style-type: none"> <li>– SNMP</li> </ul> </li> </ul> </li> <li>• EtherTalk:ELAP, AARP, DDP, AEP, NBP, ZIP, RTMP, ATP, PAP</li> <li>• AppleTalk</li> <li>• Bonjour</li> <li>• NetBEUI: SMB, NetBIOS</li> </ul>
Supported Operating Systems	<ul style="list-style-type: none"> <li>• Windows <ul style="list-style-type: none"> <li>– Vista</li> <li>– XP</li> <li>– 2000</li> </ul> </li> <li>• Macintosh <ul style="list-style-type: none"> <li>– OS X 10.2 or later</li> </ul> </li> </ul>
Print Service	<ul style="list-style-type: none"> <li>• LPR</li> <li>• FTP</li> <li>• Port 9100</li> <li>• Web Direct Printing</li> <li>• QSERVER Binder</li> <li>• QSERVER NDS</li> </ul>
Functions	<ul style="list-style-type: none"> <li>• Self-diagnostic test printing</li> <li>• Banner supported</li> <li>• Monitoring/configure by Web browser</li> <li>• Ilumina status notification by E-Mail</li> </ul>

## Network Summary Printout:

The printer server's network summary reports the printer's MAC Address (Ethernet address).

- Turn the printer on.
- Press the print server Test button for more than three seconds and release.

The printer's MAC Address appears on the first page under **General Information**.

## General Information

Network Function Name	Xante Illumina
MAC Address	00:80:87:1B:E9:14
HUB Link Setting	Auto Negotiation
HUB Link Status	OK (100BASE-TX Full)
Network Status	Unicast Packets Received Packets Transmitted Unsendable Packets Bad Packets Received

The first six digits of the MAC Address are the same for the XanteLAN print servers.

The last six digits of the MAC Address are unique to each XanteLAN and are required to set up the print server.

The hub link status results are also printed (normally “OK”).

## Configuration Methods

You can configure the print server by using one of the following methods:

Utility	Features	System Requirements
Quick Setup	<p>Configure the print server easily and simply without installing any software packages into your system.</p> <p>You can set the following:</p> <ul style="list-style-type: none"><li>• Enable/disable TCP/IP,</li><li>• EtherTalk, NetBEUI protocols</li><li>• Set IP address, Subnet Mask and Gateway for TCP/IP manually or by using DHCP.</li><li>• Zone name and Port name for EtherTalk.</li></ul>	<p>Windows*</p> <ul style="list-style-type: none"><li>• Vista</li><li>• XP</li><li>• 2000</li></ul> <p>*with TCP/IP protocol or IPX/SPX protocol installed.</p>

Utility	Features	System Requirements
AdminManager	Configure the print server in detail.	
Web Browser	Configure the print server and printer by using a Web browser.	Microsoft Internet Explorer or similar. Operating system that supports the Web browser
TELNET	Configure the print server using TELNET.	Third-party vendor developed TELNET client package.  A TELNET Application is standard in Windows.
SNMP	The printer and network card can be controlled using a third-party vendor developed SNMP application.	Third-party vendor developed SNMP application.

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## Chapter 2—Configuring the Print Server

This chapter explains the various ways you can configure your print server. It consists of the following:

- Using AdminManager Quick Setup
- Using a Web Browser
- Using AdminManager Standard Setup
- Using TELNET

### Configuration: Using AdminManager Quick Setup

#### Introduction



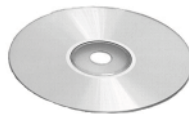
- This utility can only be used on a PC that can be connected to the network with TCP/IP or IPX/SPX.
- This utility must be used on a PC that is located in the same segment as the Illumina.

The AdminManager Quick Setup utility allows you to configure the print server easily and simply without installing any software packages.

You can configure the following:

- Enable/disable TCP/IP, EtherTalk, NetBEUI protocols.
- Set IP address, Subnet Mask and Gateway for TCP/IP manually or by using DHCP.
- Set NetWare mode and create Queue/Print Server/Printer objects.
- Zone name and Port name for EtherTalk.

#### Using Quick Setup



1. Insert the Drivers CD provided with your Illumina into the CD-ROM drive and wait for it to autorun.

If the Menu Installer does not start automatically, click [Start] → [Run] → [Browse]. Browse to your CD-ROM and click [Install] → [Open] → [OK].

2. Click [Next] to accept the Software License Agreement, then select your language.
3. Click [Custom Install].
4. Click [Network Software].
5. Click [Installation/Config].
6. Click [Admin Mgr / Quick Setup]. The Setup Utility opens.
7. Select the language.
8. Click [Xanté Device Quick Setup]. The Welcome window will appear.
9. Click [Next] and follow the on-screen instructions.



The NetWare Client 32 or IntranetWare Client should be installed on the PC used for the creation of network queues. Installation enables the user to create network queues and perform other functions.

10. When you are done making your selections, review them and if they are correct, click [Execute].

The new settings are transmitted to the network card, but the network card is still operating with pre-transmission settings.

11. Click [Finish] to validate the new settings. The print server will reinitialize.

## Configuration: Using a Web Browser

If the print server is connected to the network using TCP/IP, its settings and the Illumina menu settings can be configured using a Web browser such as



The network addresses used in this manual are shown as examples only. Network addresses used in your installation should be within the appropriate address range and have the correct subnet mask for your network segment..

To apply configuration changes using a Web browser, you will be prompted for a username and password

- username = root
- default password = the last six digits of the MAC address.

Note: The password is case sensitive, use uppercase.

## Launching the Web Browser



The illustrations below are from Microsoft Internet Explorer.

1. Have a copy of the network summary printout on hand
  - The MAC address is listed under “General Information.” You will use the last six digits of the MAC Address (minus punctuation marks) as the password when logging in for the first time.
  - The IP Address, Subnet Mask and Default Gateway are listed under “TCP/IP Configuration.”
2. Launch the Web browser.
3. Enter the print server’s IP Address:
4. Press the ENTER key. The Ilumina Status window will appear.



You can also launch the web browser from within the AdminManager utility. To do this, highlight the appropriate print server, then click [Setup] → [Setup by HTTP]:

Setup
XANTÉ Device Setup
Setup by HTTP
Setup by TELNET
Create NetWare Queue
Delete NetWare Object
Reset
Test Print
IP Address Setup

5. To ensure correct operation, change the following browser setting:
  - a. Microsoft Internet Explorer:



- 1) In the Tools pull-down menu, select [Internet Options].
  - 2) On the [General] tab, under [Temporary Internet files], click [Settings...].
  - 3) Under [Check for newer versions of stored programs], select [Every visit to the page].
  - 4) Click [OK].
- b. Netscape Navigator:
- 1) In the Edit pull-down menu, select [Settings].
  - 2) Under [Details], click [Cache].
  - 3) Under [Document in cache is compared to document on network], select [Once per session].



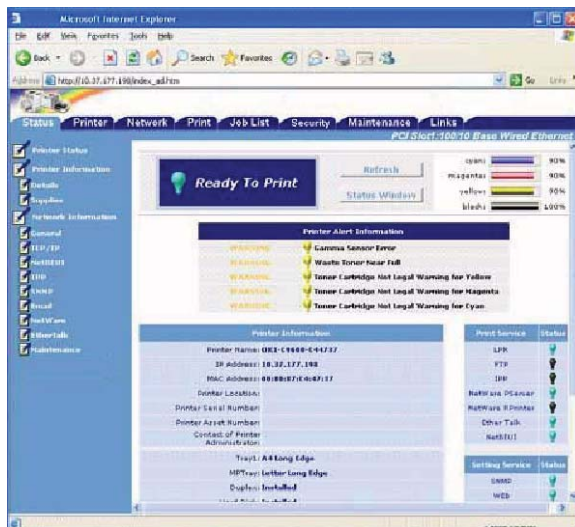
If you change the window size of the browser immediately after changing the configuration, [Security information] may appear. Uncheck [Display this message next time].

6. Click [OK].
7. Click [Administrator Login]. The [Connect to] window will appear.
8. Enter “root” for the [User Name] and your password—the default is the last six digits of the MAC address—under [Password].



9. Click [OK].
10. Click Skip to navigate to the main menu page.

## Using the Web Browser



1. Click on a tab to access the settings for a particular category.
2. In the left column, click the category for which you wish to make changes.
3. When you are done making changes, click [Submit] to send the to the print server.



For more details on setting non-security type configurable items using the web browser, see “Configuration: Configurable Items” later in this chapter. For information on setting up security features using the web browser, see “Security Features: IPP Encryption” and “Security Features: Web Encryption”.

## Changing the Password

1. Open the browser and enter the IP Address for the print server, then login with your current password.

2. Click [Security] → [Password Configuration].
3. Under [Administrator (root/admin) Password Configuration], enter the new password, then enter it again under [Confirm New Admin Password].
4. Click [Submit].

## Configuration: Using AdminManager Standard Setup

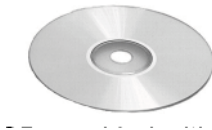
AdminManager Standard Setup is a powerful Microsoft Windows-based utility for configuring all print server functions using a graphical user interface.



- This utility can only be used on a PC that can be connected to the network with TCP/IP or IPX/SPX.

- This utility must be used on a PC that is located in the same segment as the Ilumina.

## Installing AdminManager



1. Insert the Drivers CD provided with your Ilumina into the CD-ROM drive and wait for it to autorun.

If the Menu Installer does not start automatically, click [Start] → [Run] → [Browse]. Browse to your CD-ROM and click [Install] → [Open] → [OK].

2. Click [Next] to accept the Software License Agreement, then select your language.
3. Click [Custom Install].
4. Click [Network Software]
5. Click [Installation/Config].
6. Click [Admin Mgr / Quick Setup]. The Setup Utility will open.
7. Select your language.
8. Click [Network Device Standard Setup]. When the Welcome window appears, choose one of the following two options.



- a. Run the utility from the CD [Execute from CD-ROM]
  - b. Load the utility onto your hard drive and run it from there [Install and Execute].
9. Click [Next].
  - a. If you selected [Install and Execute], follow the on-screen instructions to install AdminManager, then see the following section, “The AdminManager Interface.”
  - b. If you selected [Execute from CD-ROM], see the following section, “The AdminManager Interface.”

## The AdminManager Interface

To open the standard version of AdminManager from your desktop, click [Start] → [Programs] → [Network Device Setup Utility] → [AdminManager].



The CD will install to [Program Files\Admin 32]

## Pull-Down Menus

### File menu

- Search:  
Locates and lists all printers or digital color presses in your network which have the XantéLAN installed.
- Exit  
Exit the program.

### Status Menu

- Printer Status  
Displays the current status of the Illumina
- System Status  
Displays the current network card configuration. The configuration data can be saved as a log file.
- NetMeter  
Displays the current network status. For more information, see the NetMeter on-line Help file.

- **List of Configuration Items**  
Displays current configuration. Configuration data can be saved as log file.

## Setup Menu

- **Network Device Setup**  
Use this to configure the print server card.



To find corresponding items in the Web Browser and TELNET, see the summary of configurable items in the “Introduction” at the beginning of this chapter.

## General Tab (Network Device Setup)

The General tab allows you to change the admin password.

1. Click [Change].
2. Enter the current value, then enter the new value and re-enter it under [Confirm ...].



The default admin password is the last six digits of the MAC Address, minus any punctuation marks. E.g., for a MAC (Ethernet) Address of 00:80:87:A4:55:79, the password would be A45579.

3. Click [OK].

### **TCP/IP Tab (Network Device Setup)**

Item	Comments
Use TCP/IP Protocol	Enable/disable TCP/IP protocol.
Use DHCP/BOOTP	Click to select this item if the IP address, subnet mask, default gateway and IP addresses for DNS primary server and secondary servers are retrieved from the DHCP or BOOTP server.
Use IPv6	Use to enable/disable IPv6.
Use Windows Rally	Windows Vista only: Use to discover and configure devices over a network.
IP Address	Set the IP address of the selected network interface card.
Subnet Mask	Set the subnet mask of the selected network interface card.
Default Gateway	Set the default gateway of the selected network interface card.
Auto Discovery...	Use to enable/disable Network PnP and Rendezvous, and to set the Device Name.
DNS Server...	Set IP addresses for DNS primary and secondary servers.
WINS Server...	Use to set IP addresses for primary and secondary servers, and to enter a Scope ID.

### **Netware Tab (Network Device Setup)**

Item	Comments
Use NetWare Protocol	Enable/disable NetWare protocol.
User IPX Protocol	Click to deselect if you do not wish to use IPX
User TCP/IP Protocol	Click to select TCP/IP protocol.
Print Server Name	Set a Print Server name.
Frame Type	Set the primary NetWare frame type.
Operation Mode	Select the NetWare mode: PSERVER Mode (the default) RPRINTER Mode
Bindery Setup check box.	Click to deselect Bindery. When Bindery Setup is deselected, the Bindery Setup... button is greyed out.

Item	Comments	
Bindery Setup	Configure Bindery mode items, including.	
	File Server to be connected.	Specify up to 8 file servers to connect.
	Password.	Set a password for the Print Server
	Job Polling Time	Set the print job polling interval in seconds.
NDS	Set the NDS Tree and Context where the Print Server was created.	
RPRINTER Setup	Appears if you select RPRINTER mode under Operation Mode.  The Following can be configured:	
	Print server to be connected.	Specify up to 8 file servers to connect.
	Time Out	Set the duration from the last data's arrival to freeing of the port, in seconds.
Printer Name	Set the NetWare printer object name.	

#### **EtherTalk Tab (Network Device Setup)**

Item	Comments
Use EtherTalk Protocol	Enable/disable EtherTalk protocol.
Printer Name	Set the EtherTalk Printer object name.
Zone Name	Set the name of the zone to which the print server belongs.

#### **NetBEUI Tab (Network Device Setup)**

Item	Comments
Use NetBEUI Protocol	Enable/disable NetBEUI protocol.
Short Printer Name	Set a name for the print server.
Workgroup	Set a name for the work group to which the print server belongs.
Comment	Set the comments for the print server.



### SNMP Tab (Network Device Setup)

Item	Comments	
Use SNMP	Enable/disable	
SNMPv1 settings	SNMP Write community	Change
	SNMP Read community	Change
SNMPv3 settings	User name	Set a user name.
	Authorization settings	Options to Setup and Delete.
	Privacy (encryption) settings	Options to Setup and Delete.
SysContact	Set the printer manager name.	
SysName	Set the printer model name.	
SysLocation	Set the location where the Ilumina is installed.	

Item	Comments	
Printer Trap Setup...	The following items can be configured:	
	Printer Trap Community Name	This community name is assigned to outgoing printer status traps such as off-line, paper out, etc.
	TCP #1 through TCP #5	Set up to five IP addresses to which a Trap packet will be sent.
	Detail... [for TCP #1 through TCP #5]	Click to enable sending a Trap packet for any or all of the following selectable conditions: <ul style="list-style-type: none"> <li>• Printer Reboot</li> <li>• Receive Illegal</li> <li>• Online</li> <li>• Offline</li> <li>• Paper Out</li> <li>• Paper Jam</li> <li>• Cover Open</li> <li>• Printer Error</li> </ul>
	IPX	Set node address and network address to which a Trap packet will be sent.
	Detail... [for IPX]	Click to enable sending a Trap packet for any or all of the following selectable conditions: <ul style="list-style-type: none"> <li>• Receive Illegal</li> <li>• Online</li> <li>• Offline</li> <li>• Paper Out</li> <li>• Paper Jam</li> <li>• Cover Open</li> <li>• Printer Error</li> </ul>

### E-mail (Send) Tab

Item	Comments
Use SMTP Transmit	Enable/disable sending E-mail using SMTP.
SMTP Server Name	Set the host name of the SMTP server.
Printer E-mail Address	Set the E-mail address that is used in the [From] field in the mail header.

Item	Comments	
Destination Address 1... through 5...	Set the following parameters:	
	Destination Address	Set E-mail address to which E-mail should be sent.
	Notify Mode	Select PERIOD or EVENT.
	When PERIOD is selected:	
	Check Time	Used to set the interval at which the selected events are checked. E-mail will be sent at that interval for each selected event which has occurred.
	Period Mode	Set ON/OFF for the events listed.
	When EVENT is selected	
	Event Mode	Select Enable (ON), Disable (OFF) or Immediate (NoWait, e-mail is sent as soon as the event occurs) for the listed events. If Enable is selected, the check interval can be set in hours and /or minutes (0, 15, 30, or 45).
Attach Info.	Select whichever information is to be included in the E-mail.	
Comment...	Set up to four lines of text to be included with the E-mail as comments.	
Authentication...	Used to set the following security information:	
	User SMTP Authentication	Enable/disable SMTP authentication.
	User ID	Set the user ID for authentication.
	User Password	Set a password for authentication.

Item	Comments	
Others...	Set the following Items:	
	SMTP Port Number	Set the port number of SMTP (default is 25).
	Reply-To Address	Set the E-mail address used for the [Reply -To] field in the mail header.

### **E-mail (Receive) Tab (Network Device Setup)**

The print server supports an e-mail reception function (POP3) allowing the Illumina to print PDF and text files attached to e-mails.

Not all Illuminas support this function. If the POP tab is not displayed, your Illumina does not support this function.

Item	Comments	
Use POP Receive	Enable/disable receiving E-Mail via POP3.	
POP3 Server	Set the IP address or host name of the POP3 server.	
POP3 Server UserID	Set User ID for POP3 server.	
POP3 Server Password	Set a password for the POP3 server.	
POP Detail...	Set the following:	
	Use APOP	Select if you want to use APOP.
	POP3 Port Number	Set the port number for APOP (default is 110).
	Mail Polling Time.	Set interval to retrieve E-Mail(s) from the POP3 server. Selectable values, OFF, 1min, 5min (default), 10min, 30 min, 60 min.
Use SMTP Receive	Enable/disable SMTP receive.	
Domain Filter...	Set the following:	
	Use Domain Filter	Enable/disable domain filtering.
	Filter Policy	Select ACCEPT (the default) or DENY.
	Domain Filter	Define up to five domain filters.

### SNTP Tab (Network Device Setup)

Item	Comments
Use SNTP	Enable/disable SNTP (Simple Network Time Protocol).
NTP Server 1 Address	Set the IP address or host name for NTP Server 1.
NTP Server 2 Address	Set the IP address or host name for NTP Server 2.
Adjust Interval	Set the interval for sending time update requests to the server. Select 1 hour (the default), 12 hours or 24 hours.
Local Time Zone	Set the local time zone from -12:00 to +13:00. Minute interval is selectable from 00 (the default), 15, 30 or 45.
Daylight Saving	When this is selected, one hour is added to the local time.

### Maintenance Tab (Network Device Setup)

Item	Comments	
LAN Scale	Select NORMAL (the default) or SMALL.	
IP Filter Setup...	The following items can be configured:	
	Use IP Filter	Enable/disable IP Filtering. Default is disabled.
	Admin IP Address	Enter the Illumina's IP Address.
	IP Address Range	Set up to 10 IP Filter address ranges: [IP Filter Range 1] through [IP Filter Range 10].
	Printing	Enable/disable printing of the specified IP address range. Default is disabled.
	Configuration	Enable/disable changing IP address ranges. Default is disabled.

Item	Comments
Service...	<p>The following features can be selected by clicking their check box.</p> <ul style="list-style-type: none"> <li>• TCP/IP Protocol (enabled)</li> <li>• NetBEUI Protocol (disabled)</li> <li>• NetWare Protocol (disabled)</li> <li>• EtherTalk Protocol (disabled)</li> <li>• FTP Service (enabled)</li> <li>• Use Telnet Service (enabled)</li> <li>• Use Web Service (enabled)</li> <li>• Use SNMP Service (enabled)</li> <li>• Use POP3 Protocol (disabled)</li> <li>• Use encrypted communications for configuration data</li> </ul>

### SSL/TLS Tab (Network Device Setup)

See chapter 3, “Utilities” for more information.

Item	Comments
Encryption Strength	<p>Set the strength of encryption:</p> <ul style="list-style-type: none"> <li>• Strong = highest security, slowest speed</li> <li>• Standard = medium security, medium speed</li> <li>• Weak = least security, fastest speed</li> </ul>
Self-signed Certificate	For IPP encryption within an organization’s internal network (intranet).

Item	Comments	
Create Certificate...	When Self-signed Certificate is selected, the following items are configured:	
	Common Name	The Illumina's IP Address appears here.
	Organization	Enter the name of your organization.
	Organization Unit	Optional. Allows you to enter a subdivision or department name.
	Locality	Enter the name of the city where the organization is located.
	State/Province	Enter the state or province where the organization is located.
	Country/Region	Enter the country or region where the organization is located.
	Key Exchange Method	Select RSA (the default) or Diffie-Hellman(DSS).
	Key size	Select 512, 1024 (the default), or 2048 bits.
	Term of Validity	Enter a starting and ending date (month/date/year) for which the certificate is valid.
CA-signed Certificate...	Used for web encryption to provide security when printing over the internet. Requires an outside certification service which must be purchased separately.	
Create Certificate...	When CA-signed Certificate is selected, the following items are configured:	
	Common Name	The Illumina's IP Address appears here.
	Organization	Enter the name of your organization.
	Organization Unit	Optional. Allows you to enter a subdivision or department name.
	Locality	Enter the name of the city where the organization is located.
	State/Province	Enter the state or province where the organization is located.
	Country/Region	Enter the country or region where the organization is located.
	Key Exchange Method	Select RSA (the default) or Diffie-Hellman(DSS).
	Key size	Select 1024 (the default) or 2048 bits.

### IEEE802.1X Tab (Network Device Setup)

Item	Comments	
Use IEEE802.1X	Enable/disable	
EAP Type	The following items can be configured:	
	EAP-TLS	Use EAP-TLS protocol
	PEAP	Use EAP-TLS protocol
Use SSL/TSL	Enable/disable	
Authenticate server	Enable/disable	
Certificate	Client certificate	File: Password: Options to Import, Delete, View
	CA certificate	File: Password: Options to Import, Delete, View

- **Setup by HTTP**  
Launches the default browser in your environment to access the selected printer's web page.
- **Setup by TELNET**  
Launches the TELNET application in your environment to access the selected printer's TELNET port.



The TELNET application is not included as part of the print server package. Install the TELNET package on to your system. For further information, see your Windows manual.

- **Reset**  
Resets the selected network interface card.
- **Test Print**  
Prints the self-diagnostic test pages.
- **IP Address Setup**  
Sets the static IP address of the network interface card manually. If you only use TCP/IP and the print server has not yet been configured, occasionally it may not be displayed on AdminManager. You can configure the IP address of the print server by this function.



1. Enter the [Ethernet Address] (MAC Address) and the [IP Address], then click [OK].



The Ethernet (MAC) Address is displayed under “General Information” on the self-diagnostic test printout (see “Self Diagnostic Test” in chapter 1 for details).

2. AdminManager asks whether you want to initialize the network interface card or not. Select [Yes].

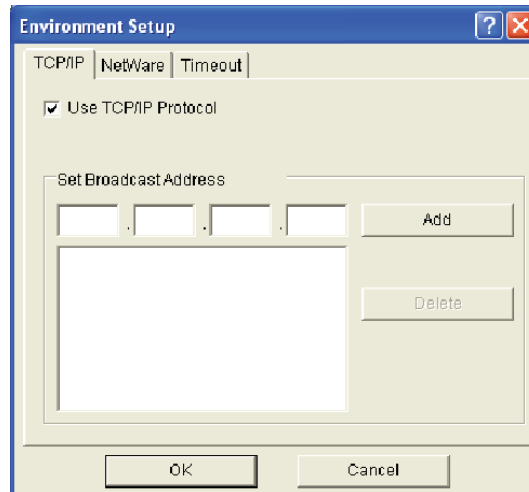


Even if you select [No] here, the IP address that you set can be used after turning the Illumina OFF and ON. The requirement to turn your Illumina OFF and ON is dependent on the network interface card.

### Option Menu

- **Use TCP/IP Protocol**  
If this item is selected, AdminManager uses TCP/IP protocol to search/configure network interface cards.
- **Use IPX/SPX Protocol**  
If this item is selected, AdminManager uses IPX/SPX protocol to search/configure network interface cards.
- **Environment Setup**  
Set environment items such as broadcast addresses for TCP/IP protocol, network addresses for NetWare protocol and Time Out.

## TCP/IP Tab (Environmental Setup)



Item	Comments
Use TCP/IP Protocol	Enable/disable TCP/IP protocol. The default is enabled. If disabled, the search will not be carried out using TCP/IP.
Set Broadcast Address	Set broadcast addresses that are used to search Xanté network interface cards using the TCP/IP protocol.
Add	Click [Add] to add the address to the list in the box.
Delete	Select an address in the box, then click [Delete] to remove it.

## NetWare Tab (Environmental Setup)

Item	Comments
Use NetWare Protocol	Enable/disable NetWare protocol. The default is enabled. If disabled, the search will not be carried out using NetWare.
Auto Search	If [Auto Search] is selected (the default), AdminManager will search all networks that it can detect.
Set Network Number	Set network addresses that are used to search the network interface cards via NetWare protocol. For large networks with many NetWare file servers, specify the network address to which the network card belongs.
Add	Click to add the network number you have entered to the list box.
Delete	Select an address in the box, then click [Delete] to remove it.

### Timeout Tab (Environmental Setup)

Item	Comments
Obtain the printer name via SNMP	Enable/disable.
Community name	Set a community name.
Add	Click to add the entry to the list box.
Delete	Select an entry in the list box, then click [Delete] to remove it.

### Timeout Tab (Environmental Setup)

Item	Comments
Set Timeout: Printer Search	[Search Every (20-180sec)] Set the response waiting time from the network card in seconds. Default is 30 seconds.
Set Timeout: Data Send/Receive	[Time Outs (1-60sec)] Set time out between AdminManager and the network interface card in seconds. Default is 5 seconds.  [Retry (1-5)] Sets how many times AdminManager will retry to transmit/receive data to/from the network interface card. Default is 3 retries.

### Help Menu

- **About**  
Provides software Version and copyright information.

## Chapter 3 - Utilities

This chapter covers the following:

- PrintSuperVision Management Utility
- Xanté LPR Printing Utility

### Utilities: PrintSuperVision Management Utility

PrintSuperVision is a web-based application for managing printing devices connected to a network. It consists of two parts:

- A web application based on Microsoft web server (Internet Information Server, IIS or Personal WEB Server, PWS), that provides the user interface.
- A monitoring program (PrintSuperVisor) that runs all the time, collecting data and saving it in a database for statistical reports and sending E-mail alerts based on the saved configuration.

PrintSuperVision requires the .NET environment to be installed on the PC on which it runs. The supplied installer will install this if necessary.

### PrintSuperVision's Main Functions

- Maintaining the list of printing devices and organizing them in logical groups.
- Initially discovering and configuring printers and digital color presses connected to the network.
- Locating printers and digital color presses visually on maps.
- Monitoring devices over time and saving data for statistical reports.
- Sending e-mail alerts when selected events occur that affect the functionality of the Illumina.
- Creating statistical reports about usage of printers and digital color presses.
- Tracking maintenance data related to printers and digital color presses.
- Integrating with Xanté's on-line web support.

### System Requirements

#### Windows

The main PrintSuperVision application can be installed in any of the following Windows systems.

Operating System	Service Pack	IIS	MDAC and .NET Framework
Windows XP Professional	SP2	IIS installed as an option. Available on the Windows XP CD. Install IIS before installing .NET framework.	MDAC and .NET framework available for download from Microsoft. DMAC 2.8 and .NET framework version 1.1 included as part of PSV install.
Windows 2000 Professional	SP4	Internet Service Manager included in the OS. Available in the Windows 2000 CD, Install IIS before installing .NET framework.	MDAC and .NET framework available for download from Microsoft. DMAC 2.8 and .NET framework version .1 included as part of PSV install.
Windows 2000 Server / Advanced Server / Datacenter Server			
Windows XP Home	SP2	Works only with PSV Embedded Web Server, available in the PSV Install Package.	MDAC and .NET framework available for download from Microsoft. DMAC 2.8 and .NET framework version 1.1 included as part of PSV install.

### Supported Browsers

- Internet Explorer (IE) 6.0 and above.
- Firefox 1.5 and above.
- Netscape Navigator 8.0 and above.
- Opera 8.5 and above.

The following options must be enabled in Windows:

- TCP/IP.
- SNMP
- Anonymous access for IIS
- Administrative privileges for the system

- In NTFS systems, the folder should have Read/Write access

The PrintSuperVision application can be accessed from any Windows, Macintosh, Unix, or Linux desktop that supports any of these browsers.

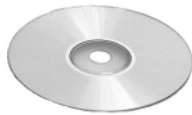
## Supported Printers and Digital Color Presses

PrintSuperVision provides general management information for Xanté and non-Xanté printers and digital color presses connected to the network.

For Xanté Iluminas, additional details, reports, and added features are available.

While the Ilumina properties are displayed in PrintSuperVision, only a few of these settings can be set. For setting any other Ilumina settings, a hyperlink to the Ilumina's web page is provided in PrintSuperVision.

## Installing PrintSuperVision



Installation requires administrator privileges.

1. Insert the Drivers CD provided with your printer into the CD-ROM drive and wait for it to autorun.

If the Menu Installer does not start automatically, click [Start] → [Run] → [Browse]. Browse to your CD-ROM and click [INSTALL.EXE] → [Open] → [OK].

2. Click [Next] to accept the Software License Agreement, then select your language.
3. Click [Custom Install].
4. Click [Network Software].
5. Click [Administration Tools].
6. Click [PrintSuperVision]. The installation Wizard opens.
7. Follow the on-screen instructions.

- In the “Edit Data” window, you can specify a port number for PrintSuperVision (the default is 80).
- When the installation ends, the “Setup complete” window appears.

8. Click [Finish].

## Running PrintSuperVision

To run PrintSuperVision Server:

- Click [Start] → [Programs] → [PrintSuperVision] → [PrintSuperVision]
- or
- Double-click the [PrintSuperVision] icon on the desktop for the PrintSuperVision server.

To run PrintSuperVision Client

1. Open your web browser.
2. Enter the address  
  
http://[fill in the server IP address or host name]/PrintSuperVision.
3. Or, If you changed the port number, enter the address with the port number included, e.g.:  
  
http://172.168.20.127/PrintSuperVision:8080.

## Help

PrintSuperVision has an on-line help facility.

## Uninstalling PrintSuperVision

To uninstall PrintSuperVision, either use the utility’s uninstall program or use the Windows Add/Remove Programs feature.

### The PrintSuperVision Uninstall Program

To run the uninstall program:

- Click [Start] → [Programs] → [PrintSuperVision] → [Uninstall PrintSuperVision]

## The Windows Add/Remove Program

To run the Windows Add/Remove Program:

1. Click [Start] → [Settings] → [Control Panel].
2. Double click [Add or Remove Programs].
3. Scroll to [PrintSuperVision], and select it.
4. Click [Add/Remove].
5. When the uninstallation is complete, close [Add/Remove Programs].

In some cases, an empty [Xanté/PrintSuperVision/] directory may be left behind. If so, you need to delete the directory manually.

## Utilities: LPR Utility

The Xanté LPR Utility is a utility that allows sending data to Iluminas connected to the network via TCP/IP. The utility redirects printing data to the LPR port of the specified IP address.

## System Requirements

Windows DP or 2000 with TCP/IP protocol installed and Xante printers that support TCP/IP.

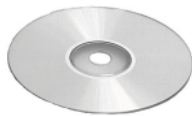
## Installing LPR Utility

Installation consists of three steps:

- Step 1: Load the Ilumina Driver
- Step 2: Install the Utility
- Step 3: Add the Ilumina to the Utility

### Step 1: Install the Ilumina Driver

Install the Ilumina driver on local port LPT1.



1. Insert the Drivers CD provided with your Ilumina into the CD-ROM drive and wait for it to autorun.



If the Menu Installer does not start automatically, click [Start] → [Run] → [Browse]. Browse to your CD-ROM and click [INSTALL.EXE] → [Open] → [OK].

2. Click [Next] to accept the Software License Agreement, then select your language.
3. Click [Custom Install].
4. Click [Printer Driver Installer].
5. Select [Local printer], then click [Next].
6. Select [LPT1:], then click [Next].
7. Follow the on-screen instructions to complete the driver installation. The driver installs and the program returns to the Software Installation window.

## Step 2: Install The Utility

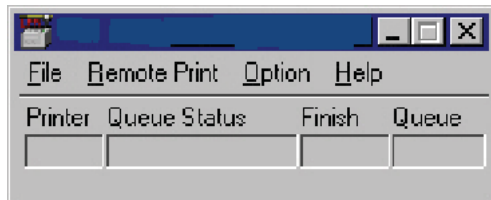


- Installation on Windows XP, 2000 and NT4.0 requires administrator privileges.
- TCP/IP protocol must be installed in your Windows system. To install the TCP/IP protocol into your Windows system consult your Windows manual.

1. Click [Network Software].
2. Click [Installation/Config]
3. Click [LPR Utility].
4. When the “Welcome” window appears, click [Next].
5. Click [Yes] to accept the Software License Agreement.
6. Verify the [Destination Folder] and [Spool Folder], and click [Next].
7. Select the startup method you wish to use to launch the utility when Windows boots:
  - To automatically launch the program in an open window, select [Register in Startup].

– To automatically launch the program minimized as an icon, select [Launch as minimized]. To open the “LPR UTILITY” window, click the icon.

8. Click [Next].
9. Verify the program folder name and click [Next]. The installation starts.
10. When the installation ends, the “Setup complete” window appears.
11. Check [Yes, I want to launch LPR Utility now].
12. Click [Finish]. The utility starts.



### Step 3: Add The Illumina to the Utility

1. With the utility open, click the [Remote Print] pull-down menu and select [Add Printer].
2. Fill in the [IP address] field:
  - If you know the IP address, simply type it in, or if you don’t know the IP address, click [Discover] and wait while the program searches the network for the Illumina. When the “Discovery” window appears, click the Illumina in the box, then click [OK].
3. Click [OK]. The Illumina is added to the main window.

### Uninstalling the Utility



If a file that has been added after installation exists in the folder to install the utility or the folder to spool, you cannot delete the folder. Delete any unwanted files before running [Uninstall LPR Utility].

1. Exit the utility: right-click the LPR Utility icon in the system tray and click [Exit].

2. Select [Start] → [Programs] → [Xanté] → [LPR Utility] → [Uninstall LPR Utility].
3. Click [Yes] when the “Confirm File Deletion” window appears. Deletion of the LPR utility starts.
4. When the “Uninstall Complete” window appears, click [OK].

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## Chapter 4 - Security Features

This chapter covers the following:

- Overview
- IPP Encryption
- Web Encryption
- Unused Protocols

### Security Features: Overview

This section covers the security features provided with the print server, including:

- SSL/TLS
- Disabling unused protocols

In addition, you can enable

- IP Filtering (see “Maintenance Tab [Network Device Setup]” in chapter 2))
- E-mail Domain Filtering for Domains 1 through 5 (see “SMTP” in chapter 2).

### SSL/TLS

Your print server incorporates both SSL (Secure Sockets Layer) Version 3.0 and TLS (Transport Layer Security) Version 1.0 to encrypt communications between computers and your Illumina.

Two types of encryption are available: IPP encryption and Web encryption:

#### IPP Encryption

- For printing via internal networks
- Uses Self-Signed Certificate
- For Windows XP and 2000 only

#### Web Encryption

- For printing over the internet
- Uses certificate signed by an external Certification Authority service (This service is not provided as part of the Fast Ether 8200e print server.)

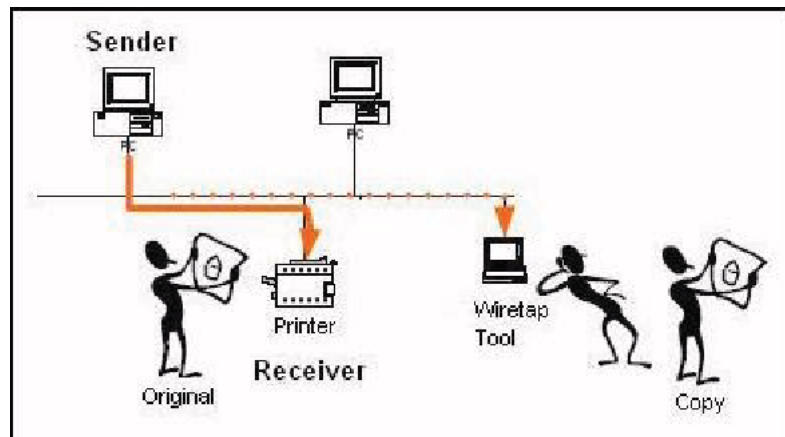
- Requires Microsoft Internet Explorer Version 5.5 and higher or Netscape Navigator version 6.2 and higher.



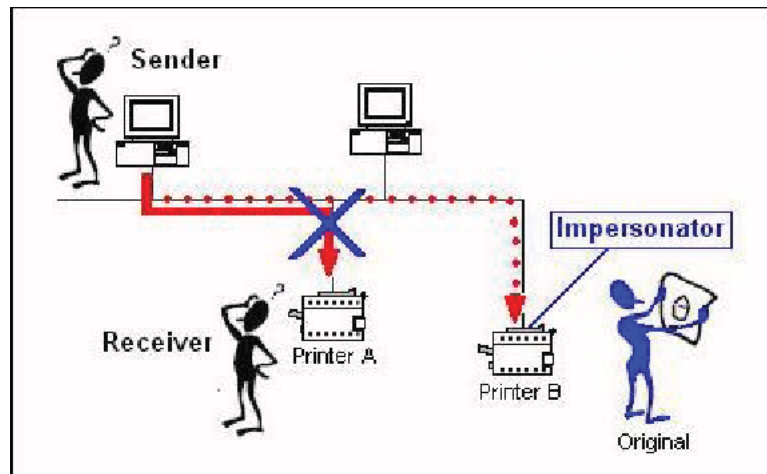
Other browsers which support SSL/TLS may work, but no guarantees are offered for them.

### Web Encryption Prevents

- Wiretapping



- Spoofing (impersonating)



## Summary of SSL/TLS Encryption Functions

Item	Specifications	Default
Security Type	<ul style="list-style-type: none"><li>• SSL Version 3.0</li><li>• TLS Version 1.0b</li></ul>	NA <sup>a</sup>
Key Exchange (Public Key Size)	<ul style="list-style-type: none"><li>• RSA (512, 1024, or 2048 bits)</li><li>• DH (512, 1024, or 2048 bits)</li></ul>	RSA, 1024 bits
Encryption Algorithm (Symmetric Key Size)	<ul style="list-style-type: none"><li>• RC4 (40 or 128 bits)</li><li>• DES (40 or 56 bits)</li><li>• 3DES (168 bits)</li><li>• AES (128 or 256 bits)</li></ul>	NA <sup>a</sup>
Hash Method	<ul style="list-style-type: none"><li>• MD5</li><li>• SHA-1</li></ul>	SHA-1
Authentication Method One-way authentication	(PC → Ilumina)	NA <sup>a</sup>
Certificate	<ul style="list-style-type: none"><li>• Self-Signed Certificate</li><li>• Certificate signed by a Certificate Authority</li></ul>	Self-Signed

a. NA = Not applicable.

### Unused Protocols

Protocols which are not used by your system can be turned off to prevent unauthorized access through them.

## Security Features: IPP Encryption

### Setting Up IPP Encryption

#### Process Summary

Step 1: Create the Self-Signed Certificate

Step 2: Enable IPP Printing at the client stations

#### Step 1: Create the Self-Signed Certificate



A self-signed certificate certifies that the Ilumina to be connected exists at the specified IP Address and contains the specified certificate information. If the Ilumina's IP Address changes, the certificate will be invalid and will have to be redefined by the administrator.

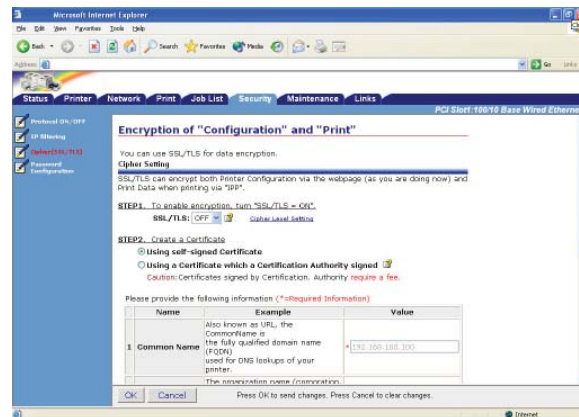
## Using the Web Browser

- Requires Microsoft Internet Explorer Version 5.5 and higher or Netscape Navigator version 6.2 and higher.



Other browsers which support SSL/TLS may work, but no guarantees are offered for them.

1. Open the web browser.
2. Type in the Illumina's IP Address (refer to the self-diagnostic printout—see “Self-Diagnostic Test” in chapter 1) and press the Enter key.
3. Click [Administrator Login], then enter
  - your [User name]  
(the default is root)
  - [Password]  
(the default is the last six digits of the MAC [Ethernet] Address, minus any punctuation).
4. Click the [Security] tab.
5. On the left side, click [Cipher (SSL/TLS)]. The “Encryption of Configuration and Print” window appears.



6. Change [SSL/TLS] to ON.
7. To change the cipher strength setting, click [Cipher Level Settings] and make your selection, then click [OK].



The default setting is Standard. Changing the setting to Strong will increase security, but slow down the speed. Changing the setting to Weak gives the fastest speed, but provides the least security.

8. Make sure [Using self-signed Certificate] is selected (the default).

9. Scroll down and under the [Value] column enter the information to be included in the certificate:

- a. To change the Key Exchange method or the size of the Public Key to be attached with the certificate, scroll down to the bottom and click [Change these settings].

- b. Select the desired method and key size, then click [OK].

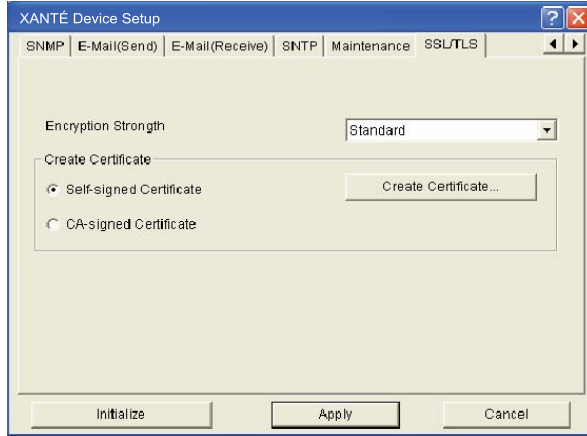


10. When done, click [OK] to send the setting to the print server. A Value List window appears.
11. Check the settings. If they are correct, click [OK]. If you need to make changes, click [Cancel], make any needed changes and click [OK] to send the revised information to the print server.
12. Click [OK]. The “Security Alert” window appears.
13. Click [Yes]. The “Connect to” window appears.
14. Enter your User Name and Password, then click [OK]. The “Encryption Status” window appears.
15. Check the settings, then click [Submit].

### **Using AdminManager**

1. Launch the AdminManager utility:
  - From the Drivers CD supplied with your Illumina:  
[Next] → select language → [Custom Install] → [Network Software] → [Installation/Config] → [Admin Mgr / Quick Setup] → select language → [Network Device Standard Setup] → [Execute from CD-ROM].
  - From your desktop (if you installed the utility from the CD):  
[Start] → [Programs] → [Network Setup Utility] → [AdminManager].
2. Click the Illumina to configure from the list.
3. Click [Setup] → [Network Device Setup]. The “Password” window appears.
4. Enter your password, then click [OK].

- Click the [SSL/TLS] tab.



Item	Comments	
Encryption Strength	Set the strength of the encryption. Switching to Strong provides greater security, but slower speed. Switching to Weak provides the fastest speed, but the least security.	
Self-signed Certificate	The default type of certificate.	
Create Certificate...	With self-signed certificate selected, set the following.	
	Common Name	Enter the IP Address for the Illumina.
	Organization	Enter a name for the organization.
	Organizational Unit	Optional. Enter a name to differentiate between divisions within an organization.
	Locality	Enter the name of the city where the organization is located.
	State/Province	Enter the name of the state or Province where the organization is located.
	Country/Region	Enter the name of the country or region where the organization is located.
	Key Exchange method.	Select RSA or DH. The default RSA is recommended.
	Key size	Select 512, 1024, or 2048 bits. The default, 1024 bits, is recommended.
	Term of Validity	Set a month/date/year and time range for which the certificate is valid
CA-signed Certificate	Used to set up a CA certificate for internet printing. See “Using AdminManager” later in this chapter for more information.	

6. With [Self-signed Certificate] selected (the default), click [Create Certificate...].
7. Enter the appropriate information then click [OK]. A window appears listing the settings you have made.
8. Review the information entered, then click [OK] to accept it.
9. Wait for the following window to appear:



10. Click [OK]. The SSL/TLS tab window appears.
11. Click [Apply]. A window appears containing a summary of your certification selection.
12. Click [OK].



13. Click [Yes]. The print server reboots with the new certification settings engaged.

## Step 2: Enable IPP Printing at Client Stations



Client stations must have Windows XP or 2000 to use IPP Encryption printing.

### Using the Web Browser

- Requires Microsoft Internet Explorer Version 5.5 and higher or Netscape Navigator version 6.2 and higher.

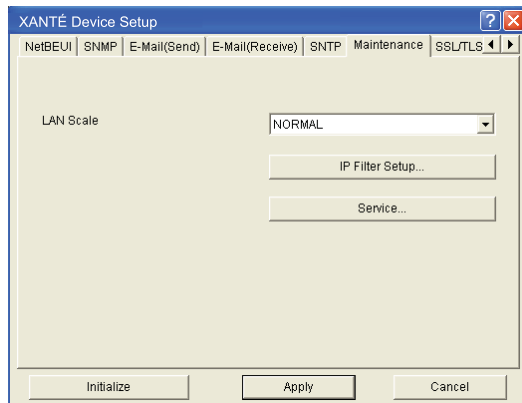


Other browsers which support SSL/TLS may work, but no guarantees are offered for them.

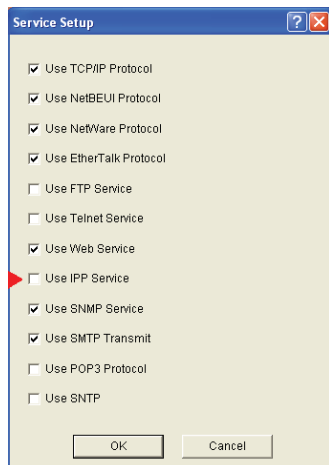
1. Open the web browser.
2. Type in the Illumina's IP Address (refer to the self-diagnostic printout—see “Self-Diagnostic Test” in chapter 1) and press the Enter key.
3. Click [Administrator Login], then enter
  - your [User name]  
(the default is root)
  - your [Password]  
(the default is the last six digits of the MAC [Ethernet] Address, minus any punctuation).
4. Click the [Network] tab.
5. On the left side, click [IPP], then [Settings].
6. Select ENABLE for [IPP].
7. Click [Submit]

### **Using AdminManager**

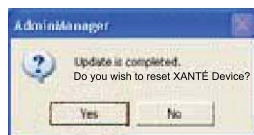
1. Launch the AdminManager utility:
  - From the Drivers CD supplied with your Illumina:  
[Next] → select language → [Custom Install] → [Network Software] → [Installation/ Config] → [Admin Mgr / Quick Setup] → select language → [Network Device Standard Setup] → [Execute from CD-ROM].
  - From your desktop (if you installed the utility from the CD):  
[Start] → [Programs] → [Network Setup Utility] → [AdminManager].
2. Click the Illumina to configure from the list.
3. Click [Setup] → [Network Device Setup]. The Password window appears.
4. Enter your password, then click [OK].
5. Click the [Maintenance] tab.



6. Click [Service...].
7. Click the box beside [Use IPP Service] to select it, then click [OK].



8. Click [Apply]. A window appears containing a summary of your certification selection.
9. Click [OK].



10. Click [Yes]. The print server reboots with the new certification settings engaged.

## Printing Using IPP Encryption

1. Open the file to be printed in your application.
2. Click [File] → [Print].
3. Select the created IPP encrypted printer (e.g., Model 1234 on <https://155.37.177.60>) from the [Select Printer] list, then click [Print].

## Security Features: Web Encryption



CA (Certification Authority) encryption requires an outside certification service. It can take about 2 weeks to get a certificate issued. The certificate is guaranteed by the CA service.

The issue time, price and available services depend on the CA you choose.

## Setting Up Web Encryption

### Process Summary

Step 1: Apply to a CA service for a certificate.

Step 2: Install the certificate on the print server.

### Step 1: Apply for a CA Certificate

#### Using Web Browser

- Requires Microsoft Internet Explorer Version 5.5 and higher or Netscape Navigator version 6.2 and higher.



Other browsers which support SSL/TLS may work, but no guarantees are offered for them.

1. Open the web browser.
2. Type in the Illumina's IP Address (refer to the self-diagnostic printout—see “Self-Diagnostic Test”) and press the Enter key.

3. Click [Administrator Login], then enter
  - your [User name]  
(the default is root)
  - [Password]  
(the default is the last six digits of the MAC [Ethernet] Address, minus any punctuation).
4. Click the [Security] tab.
5. On the left side, click [Cipher (SSL/TLS)]. The “Encryption of Configuration and Print” window will appear.



6. Change [SSL/TLS] to ON.



7. To change the cipher strength setting, click [Cipher Level Settings] and make your selection, then click [OK].



The default setting is Standard. Changing the setting to Strong will increase security, but slow down the speed. Changing the setting to Weak gives the fastest speed, but provides the least security.

8. Click [Using a Certificate which a Certification Authority signed].

**Encryption of "Configuration" and "Print"**

You can use SSL/TLS for data encryption.

**Cipher Setting**

SSL/TLS can encrypt both Printer Configuration via the webpage (as you are doing now) and Print Data when printing via "tpp".

**STEP1: To enable encryption, turn "SSL/TLS = ON".**

SSL/TLS: ☒ ON [Cipher Level Setting](#)

**STEP2: Create a Certificate**

☐ Using self-signed Certificate

☒ Using a Certificate which a Certification Authority signed

Caution: Certificates signed by Certification Authority require a fee.

9. Scroll down and type in the information to be used in the certification:

Please provide the following information (\*Required Information)

	Name	Example	Value
1	Common Name	Also known as URL, the CommonName is the fully qualified domain name (FQDN) used for DNS lookups of your printer.	<input type="text" value="192.168.100.100"/>
2	Organization	The organization name (corporation, limited partnership, university, or government agency) must be registered with some authority at a national, state, or city level.	<input type="text"/>
3	Organizational Unit	(optional) Use this optional field to differentiate between divisions within an organization.	<input type="text"/>
4	Locality	This field usually denotes the city in which the organization is located.	<input type="text"/>
5	State/Province	Enter the state where the organization operates. Do not abbreviate.	<input type="text"/>
6	Country/Region	This is the 2-character ISO format country code. For example, GB is the valid code for Great Britain, and US is the valid code for the United States.	<input type="text"/>

OK Cancel Press OK to send changes. Press Cancel to clear changes.

- a. To change the Key Exchange method or the size of the Public Key to be attached with the certificate, scroll down to the bottom and click [Change these settings].

**Detailed Information**

The following setting is recommended.

Key Exchange method:  Key size:

[Change these settings](#)

OK Cancel Press OK to send changes. Press Cancel to clear changes.

- b. Select the desired method and key size, then click [OK].



10. Click [OK]. The “Value List” window appears.
11. Check the settings, then click [OK].
12. Wait for the “Send the CSR to a Certification Authority” window to appear.



13. Copy the text in the box starting with “BEGIN CERTIFICATE SIGNING REQUEST” and ending with “END CERTIFICATE SIGNING REQUEST”, and submit it to your selected Certification Authority service, following their instructions.
14. Click [OK].

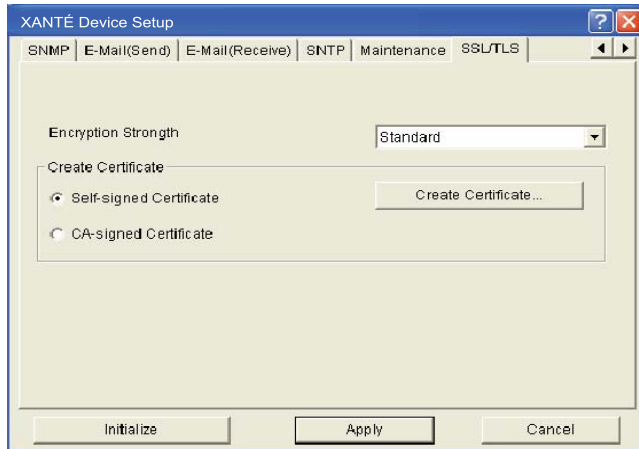


It can take about 2 weeks to get a certificate issued. While you are waiting to receive your completed certificate, do not make any changes to the print server settings as this can invalidate the certificate!

## Using AdminManager

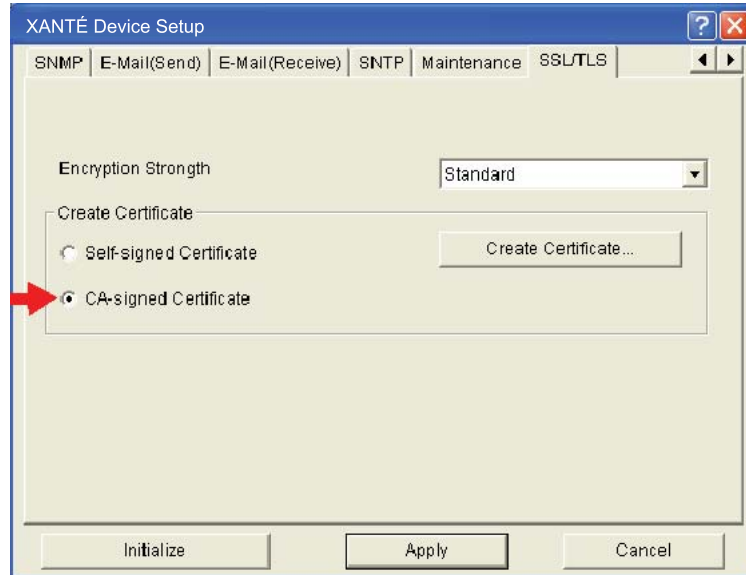
1. Launch the AdminManager utility:
  - From the Drivers CD supplied with your Illumina:  
[Next] → select language → [Custom Install] → [Network Software] → [Installation/ Config] → [Admin Mgr / Quick Setup] → select language → [Network Device Standard Setup] → [Execute from CD-ROM]
  - From your desktop (if you installed the utility from the CD):  
[Start] → [Programs] → [Network Setup Utility] → [AdminManager].
2. Click the Illumina to configure from the list.
3. Click [Setup] → [Network Device Setup]. The Password window will appear.

4. Enter your password, then click [OK].
5. Click the [SSL/TLS] tab.



Item	Comments	
Encryption Strength	Set the strength of the encryption. Switching to Strong provides greater security, but slower speed. Switching to Weak provides the fastest speed, but the least security.	
Self-signed Certificate	The default type of certificate.	
CA-signed Certificate	Click to set up a CA certificate for internet printing.	
Create Certificate...	Click to set up the CA certificate, including	
	Common Name	Enter the IP Address for the Illumina.
	Organization	Enter a name for the organization.
	Organizational Unit	Optional. Enter a name to differentiate between divisions within an organization.
	Locality	Enter the name of the city where the organization is located.
	State/Province	Enter the name of the state or Province where the organization is located.
	Country/Region	Enter the name of the country or region where the organization is located.
	Key Exchange method.	Select RSA or DH. The default RSA is recommended.
	Key size	Select 512, 1024, or 2048 bits. The default, 1024 bits, is recommended.

6. Click [CA-signed Certificate], then click [Create Certificate].



7. Enter the appropriate information then click [OK]. A window appears listing the settings you have made.
8. Review the information entered, then click [OK] to accept it.
9. Wait for the “View the CSR data” window to appear.
10. Copy the text in the box starting with “BEGIN CERTIFICATE SIGNING REQUEST” and ending with “END CERTIFICATE SIGNING REQUEST”, and submit it to your selected Certification Authority service, following their instructions.
11. Click [OK].



It can take about 2 weeks to get a certificate issued. While you are waiting to receive your completed certificate, do not make any changes to the print server settings as this can invalidate the certificate.

## Step 2: Install the Certificate

Once you receive your certificate from the CA, you must install it, using either the web browser or the AdminManager utility. Keep the certificate text handy as you will be prompted to copy and paste it into the program.



You can install only one certificate to one Ilumina. If the issued CA certificate is an intermediate certificate, install it on the client PC.

### Using Web Browser

- Requires Microsoft Internet Explorer Version 5.5 and higher or Netscape Navigator version 6.2 and higher.



Other browsers which support SSL/TLS may work, but no guarantees are offered for them.

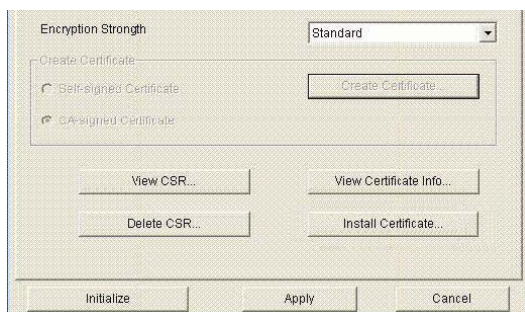
1. Open the web browser.
2. Type in the Ilumina's IP Address (refer to the self-diagnostic printout—see “Self-Diagnostic Test”) and press the Enter key.
3. Click [Administrator Login], then enter
  - your [User name]  
(the default is root)
  - [Password]  
(the default is the last six digits of the MAC [Ethernet] Address, minus any punctuation).
4. Click the [Security] tab.
5. On the left side, click [Cipher (SSL/TLS)].
6. Copy the certificate text sent by the CA service, starting with “BEGIN CERTIFICATE” and ending with “END CERTIFICATE”, and paste it into the “Paste your signed certificate(PEM) ...” box.



7. Click [Submit]. The “Security Alert” window appears.
8. Click [Yes], then enter your User name and Password and click [OK].
9. Check the Security tab window to ensure that the certificate installation is completed and that SSL/TLS is turned on.

## Using AdminManager

1. Launch the AdminManager utility:
  - From the Drivers CD supplied with your Illumina:  
 [Next] → select language → [Custom Install] → [Network Software] → [Installation/ Config] → [Admin Mgr / Quick Setup] → select language → [Network Device Standard Setup] → [Execute from CD-ROM].
  - From your desktop (if you installed the utility from the CD):  
 [Start] → [Programs] → [Network Setup Utility] → [AdminManager].
2. Click the Illumina to configure from the list.
3. Click [Setup] → [Network Device Setup]. The Password window appears.
4. Enter your password, then click [OK].
5. Click the [SSL/TLS] tab.



6. Click [Install Certificate...].
7. Copy the certificate text sent by the CA service, starting with “BEGIN CERTIFICATE” and ending with “END CERTIFICATE”, and paste it into the box, then click [Install].



8. Wait until the completion acknowledgement window appears, then click [OK]. The SSL/TLS tab window will appear.



9. Click [Apply]. A window will appear summarizing the changes.

10. Click [OK].



11. Click [Yes]. The print server will reboot with the new certification settings engaged.

## Printing Using Web Encryption



Requires Microsoft Internet Explorer Version 5.5 and higher or Netscape Navigator version 6.2 and higher. Other browsers which support SSL/TLS may work, but no guarantees are offered for them.

To make connection with the encrypted Ilumina:

1. Open your web browser.
2. Enter the Ilumina's IP address as follows (be sure to include the s after "http".:

### Internet Explorer

In the [Address] field, enter https://<Ilumina's IP Address>.

### Netscape Navigator

In the [Location/Position] field, enter https://<Ilumina's IP Address>.

3. Press the ENTER key.

## Security Features: Unused Protocols

### Disabling Unused Protocols

Disabling unused protocols prevents access to the print server through those protocols.

The easiest way to disable unused protocols is to use the Web Browser.

1. Open the web browser.
2. Enter the print server's IP Address:

### Internet Explorer

Enter the print server's IP Address in the [Address] field.

### Netscape Navigator

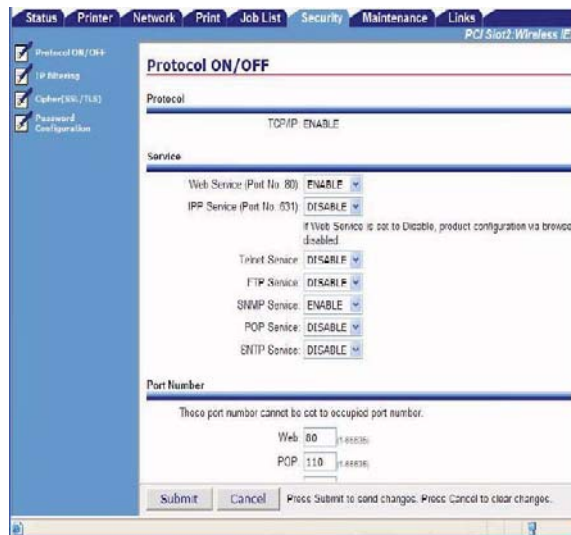
Enter the print server's IP Address in the [Location/Position] field.

3. Press the ENTER key. The Illumina Status window appears.



You also can launch the web browser from within the AdminManager utility. To do this, highlight the appropriate print server, then click [Setup] → [Setup by HTTP]:

4. Click the [Security] tab.
5. The "Protocol ON/OFF" window opens.



6. Here you can set the various available protocols to enable or disable.
7. When done, click [Submit].

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## Chapter 5 - Printing from Microsoft Windows

This chapter provides guidelines on how to print over the network from various Microsoft Windows operating systems. There are numerous ways of printing from Windows and the exact set-up will vary depending upon your environment. There are also numerous versions of Windows, which can be configured as either a client, server or both.

Although there are many variants of Windows, the principles of network printing are the same. Microsoft provides on-line help with all of their operating systems and this is a good reference point for the exact details of each configuration option within Windows

This section consists of the following:

- Overview)
- Using TCP/IP Protocol
- Using NetBEUI Protocol



For information on IPX (Novell NetWare), see “Printing from Novell NetWare” in chapter 6.

### Printing from Windows: Overview

This chapter provides guidelines on how to print over the network from various Microsoft Windows operating systems. There are numerous ways of printing from Windows and the exact set-up will vary depending upon your environment. There are also numerous versions of Windows, which can be configured as either a client, server or both.

Although there are many variants of Windows, the principles of network printing are the same. Microsoft provides on-line help with all of their operating systems and this is a good reference point for the exact details of each configuration option within Windows.

The network Illumina supports the following protocols that can be used in conjunction with the Windows operating system:

- TCP/IP
- NetBEUI
- IPX (Novell NetWare)

## Printing from Windows: Using TCP/IP Protocol

### Installation Overview

There are a number of options available when printing using TCP/IP for Windows.

Windows Version	Method
XP 2000	LPR Utility Microsoft LPR <sup>a</sup> Port 9100 <sup>a</sup> IPP <sup>a</sup>
Me 98	LPR Utility
NT 4.0	LPR Utility Microsoft LPRa

Although there are some differences in configuration options between the various Windows platforms, the procedure for printing using TCP/IP is the same.

Step 1: Ensure that the TCP/IP protocol has been installed in Windows. This can be confirmed by checking the network settings from within the Control Panel. If TCP/IP has not been installed refer to “Installing TCP/IP Protocol” later in this chapter.

Step 2: If not already done, a suitable IP address, Subnet Mask and Gateway address should be configured. The current addresses appear under “TCP/IP Configuration” on the Self-Diagnostic test printout (see “Self-Diagnostic Test” in chapter 1). It is vital that the IP address entered is unique and valid. Entering an incorrect IP address may cause severe network problems. Please check the address with the network administrator. To change the addresses, see “Configuring the IP Address, Subnet Mask and Gateway” later in this chapter.

Step 3: Configure Windows to print to the network Ilumina. See “Configuring Windows to Print to the Network Ilumina” later in this chapter.



If your network environment uses domain names, DNS should be enabled and configured on your system. However, this step is not essential to enable network printing.

Step 4: Restart your computer.

## Installing TCP/IP Protocol

If TCP/IP protocol is not already installed on your computer, follow the instructions below to install it.

## Installing TCP/IP Protocol Windows XP



The Windows XP installation CD-ROM may be required to complete the installation.

1. Click [Start] → [Control Panel].
2. Click [Network and Internet Connection] → [Network Connection].
3. Double-click [Local Area Connection] and click [Properties] in the “Location Area Connection Status” window.
4. If the [Internet Protocol (TCP/IP)] is not listed, click [Install.].
5. In the “Select Network Component Type” window, click [Protocol] → [Add].
6. In the “Select Network Protocol” window, click [Internet Protocol (TCP/IP)] → [OK].
7. Follow the on-screen instructions to finish the installation.

## Installing TCP/IP Protocol Windows 2000

1. Click [Start]→ [Settings]→ [Network and Dial-up Connections].
2. Double-click the [Local Area Connection] icon
3. In the “Local Area Connection Status” window, click [Properties].
4. In the “Local Area Connection Properties” window, click [Install].
5. In the “Select Network Component Type” window, click [Protocol] → [Add].
6. In the “Select Network Protocol” window, click [TCP/IP Protocol] → [OK].
7. Click [Close].
8. Click [Close].

## Installing TCP/IP Protocol Windows NT 4.0



The Windows NT 4.0 installation CD-ROM may be required to complete the installation.

1. Click [Start] → [Settings] → [Control Panel].
2. Double-click the [Network] icon.
3. In the "Network" window, click the [Protocols] tab.
4. If the [TCP/IP Protocol] is not listed, click [Add].
5. In the "Select Network Protocol" window, click [TCP/IP Protocol] → [OK].
6. Follow the on-screen instructions to finish the installation.

## Installing TCP/IP Protocol Windows Me/98



The Windows installation CD-ROM may be required to complete the installation.

1. Click the [Start] → [Settings] → [Control Panel].
2. Double-click the [Network] icon.
3. In the "Network" window, click [Configuration Panel].
4. If the [Client for Microsoft Networks] is not listed, click [Add].
5. In the "Select Network Component Type" window, click [Protocol] → [Add].
6. In the "Select Network Protocol" window, click [Microsoft] from the list of manufacturers, then click [TCP/IP] from the list of network protocols.
7. Click [OK].
8. Follow the on-screen instructions to finish the installation.

## Configuring the IP Address, Subnet Mask, and Gateway

First, Generate a Self-Diagnostic Test Printout with the Illumina connected to the network and switched on, press the Test button on the print server for more than three seconds.

The IP Address, Subnet Mask and Default Gateway appear under “TCP/IP Configuration” on the first page.

If these settings need to be changed, you can do so as follows.

### Using Web Browser

1. Open your web browser, then type the Illumina’s IP address in the URL area and press the Enter key.
2. Click [Administrator Login] and enter your [User name] and [Password].



If you are not the administrator, you will need your administrator to help you with this.

3. Click the [Network] tab.
4. On the left side, click [TCP/IP].
5. Under [Step 2], click [Set IP Address manually].
6. When done making changes, click [OK].
7. Click [Submit] to send the changes to the print server.

### Using AdminManager

1. Launch the AdminManager utility.
  - If you installed the utility on your computer, click [Start] → [Programs] → [Xanté] → [Network Setup Utility] → [AdminManager].
  - To run it off the Drivers CD, see “Installing AdminManager”.
2. Select the appropriate network card, using the Ethernet (MAC) address to identify it, and click [Setup] → [Network Device Setup].
3. Click the [TCP/IP] tab and enter the values for the [IP Address], [Subnet Mask] and [Default Gateway].
4. Click [Apply].
5. Close the AdminManager utility.

## Configuring Windows to Print to the Network Ilumina

### Configuring Windows for Printing Windows XP

Windows XP requires administrator privileges. With Windows XP, there are four options for printing using TCP/IP.

- Xanté LPR Utility
- Microsoft LPR\*

\* In order to use Microsoft LPR, it must first be installed on your system.

#### **Xanté LPR Utility**

Please follow the procedure described under “Installing LPR Utility”.

#### **Microsoft LPR**

1. Click [Start] → [Settings] → [Control Panel] → [Iluminas and Other Hardware].
2. Click [Iluminas and Faxes].
3. Click [Add Ilumina], then click [Next].
4. Click [Local Ilumina attached to this computer].
5. Clear the [Automatically detect and install my Plug and Play Ilumina] check box, then click [Next].
6. Click [Create a New Port] and [Type Standard TCP/IP Port].
7. Click [Next]. “Welcome to the Add Standard TCP/IP Ilumina Port Wizard” appears.
8. Click [Next] and enter [Ilumina name or IP address], for example: 172.168.1.31. If the example IP address is entered, the Port Name will default to IP\_172.168.1.31.
9. Click [Next]. The “Additional Port Information Required” windows appears.
10. Under [Device Type], click [Custom] → [Settings].
11. Ensure [Protocol] is set to [LPR].
12. Ensure [Queue Name] is lp and [SNMP Status Enabled] is deselected.

13. Click [OK].
14. Follow the on-screen instructions to finish the installation.

### Configuring Windows for Printing Windows 2000

Windows 2000 requires administrator privileges. With Windows 2000, there are four options for printing using TCP/IP.

- Xanté LPR
- Microsoft LPR

#### **Xanté LPR Utility**

Please follow the procedure described under “Installing Network LPR Utility”.

#### **Microsoft LPR**



To use Microsoft LPR, it must first be installed on your system.

1. Click [Start] → [Settings] → [Control Panel and Iluminas].
2. Open the [Iluminas] folder.
3. Double-click [Add Ilumina].
4. Click [Next].
5. Click [Local Ilumina] and clear the [Automatically detect my Ilumina] check box.
6. Click [Next].
7. Click [Create a new port] and then [LPR Port].
8. Click [Next] and provide the following information:
  - a. In [Name or address of server providing LPD] enter the host name or Internet Protocol (IP) address of the host for the Ilumina you are adding.
  - b. In [Name of Ilumina or print queue on that server] type lp.
9. Follow the on-screen instructions to finish the installation.

## Configuring Windows for Printing Windows NT 4.0

NT 4.0 requires administrator privileges. With Windows NT 4.0, you have two options for printing using TCP/IP. They are:

- LPR Utility
- Microsoft LPR

### **Xanté LPR Utility**

Please follow the procedure described under “Installing LPR Utility”.

### **Microsoft LPR**



In order to use Microsoft LPR, it must first be installed on your system.

1. Click [Start] → [Settings] → [Control Panel] → [Iluminas].
2. Click [Add Ilumina].
3. Click [My Computer] → [Next].
4. Click [Add Port].
5. Click [LPR Port] → [OK].
6. In [Name or address of server providing lpd], type the host name or IP address of the host for the Ilumina you are adding.
7. In [Name of Ilumina or print queue on that server], type the logical Ilumina name “lp” and then click [OK].
8. Follow the on-screen instructions to finish the installation.

## Configuring Windows for Printing Windows Me/98

When printing using TCP/IP, the Xanté LPR utility is the only option to use. See “Installing LPR Utility”.





## Chapter 6 - Printing Using Macintosh

The print server supports the Apple Macintosh AppleTalk environment.

This section consists of the following:

- Overview
- Self-Diagnostic Test Printout)
- Installing the Driver
- Printing from Macintosh: Overview

### Printing from Macintosh: Overview

The print server supports the Apple® Macintosh® AppleTalk environment. This guide is for administrators and it should be read in conjunction with the relevant Macintosh manual. The latest Macintosh service packs should be installed.

### Supported Versions

Macintosh operating systems

- OS 9.1+
- OS 10.1
- 10.2x
- 10.3x

are supported, except the original version Mac OS X.

### Printing from Macintosh: Self-Diagnostic Test Printout

The Illumina server's self-diagnostic test reports the Illumina's MAC Address (Ethernet address), required for Macintosh configuration.

1. Turn the Illumina on.
2. Press the print server Test button for more than three seconds and release.

The MAC Address appears on the first page under "General Information."

## General Information

Network Function Name	XANTÉLAN 8200e
MAC Address	00:80:87:14:32:32
HUB Link Setting	Auto Negotiation
HUB Link Status	OK (100BASE-T Full)
Network Status	Unicast Packets Received Packets Transmitted Total Packets Received Unsendable Packets Bad Packets Received

The first six digits of the MAC Address are the same for all XantéLAN print servers.

The last six digits of the MAC Address are unique to each XantéLAN and are required to set up the print server for Macintosh.

## Printing from Macintosh: Installing the Driver

### MAC OS 9.1+

1. Place the Drivers CD, supplied with your Illumina, in the CD-ROM drive.
2. Double-click the icon that appears on the desktop.
3. Open the [MAC] folder.
4. Open the [Driver Installer] folder.
5. Open the folder for your language.
6. Double-click the [MAC Installer] icon.
7. Click [Continue].
8. Click [Accept] to accept the Software License Agreement.
9. Select the installation type:
  - To install the driver and all utilities, use the default [Custom Easy Install], and click [Install].
  - To install the driver only—or the driver plus your selection of utilities—select [Custom Install] in the drop-down list. Click the boxes beside the items you wish to install, then click [Install].

10. Click [Quit].

## **MAC OS 10.1**

1. Place the Drivers CD, supplied with your Illumina, in the CD-ROM drive.
2. Double-click the icon that appears on the desktop.
3. Open the [MAC] folder.
4. Open the [Driver Installer] folder.
5. Open the folder for your language.
6. Double-click the [MAC Installer] icon.
7. Click [Continue].
8. Click [Accept] to accept the Software License Agreement.
9. Select [MAC OS X.1-X.2x Drivers] from the drop-down list, then click [Install].
10. Once the driver is installed, if you wish to install the PS Gamma Adjuster utility as well, select it from the drop-down list, then click [Install].
11. Click [Quit].

## **MAC OS 10.2x**

1. Place the Drivers CD, supplied with your Illumina, in the CD-ROM drive.
2. Double-click the icon that appears on the desktop.
3. Open the [MAC] folder.
4. Open the [Driver Installer] folder.
5. Open the folder for your language.
6. Double-click the [MAC Installer] icon.
7. Click [Continue].
8. Click [Accept] to accept the Software License Agreement.

9. Select [MAC OS X.1-X.2x Drivers] from the drop-down list, then click [Install].
10. Once the driver is installed, if you wish to install the Profile Assistant (and/or Print Job Accounting) utility as well, select it from the drop-down list, then click [Install].
11. Click [Quit].

### **MAC OS 10.3x**

1. Place the Drivers CD, supplied with your Illumina, in the CD-ROM drive.
2. Double-click the icon that appears on the desktop.
3. Open the [MAC] folder.
4. Open the [Driver Installer] folder.
5. Open the folder for your language.
6. Double-click the [MAC Installer] icon.
7. Click [Continue].
8. Click [Accept] to accept the Software License Agreement.
9. Select [MAC OS X.3x Driver] from the drop-down list, then click [Install].
10. Once the driver is installed, if you wish to install the Profile Assistant utility as well, select it from the drop-down list, then click [Install].
11. Click [Quit].

## **Printing from Macintosh: Setting Up the Illumina**

### **OS 9.1+**

Create the Desktop Illumina.

1. Activate Chooser from the Apple menu.
2. Select your model/Appletalk and highlight the Illumina name (print server ID#).

### **OS 10.1 and Above**

In Mac OS 10 you use the Print Center to setup network Illuminas.



1. Run the Print Server.
2. Click [Add Printer.]
3. Select [Appletalk].
4. From the [Printer Model] drop down menu, select your Illumina model.
5. Click [Add].
6. Quit the Print Center.

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## Chapter 7 - Troubleshooting

The network addresses used in this manual are shown for example only. Network addresses used in your installation must be generated from your own network.

- Network summary printout
- TCP/IP
- NetBEUI
- Mac

### **Troubleshooting:** Network Summary Printout

#### **Network summary does not print**

- Confirm that the NIC is installed correctly and turn the printer off and on again.
- Ensure the network cable is correctly connected.
- Connect to a different network segment, re-print the summary and see if this fixes the problem.

#### **EEPROM check registers an ERROR**

- Confirm that the NIC is installed correctly and turn the printer off and on again.
- Initialize the NIC.

### **Troubleshooting:** TCP/IP

#### **Illumina Cannot Find the Network Interface Card.**

- Turn the Illumina off and on again.
- Confirm that the network interface is enabled on the Illumina.
- Make sure there is a response to the interface card command.
- Make sure the network cable is correctly connected.
- Change the cable and try again.
- Run the Self-diagnostic test (with Illumina on, press and hold the Test button on the print server for 3 seconds, then release it).
- Make sure that the IP Address, Subnet Mask and Gateway are correct.

- Make sure that the TCP/IP protocol is set to Enable.
- Reset the network interface card to the factory default settings.
- If DHCP, BOOTP, and RARP are not used, ensure they have been set to Disable.

### **Cannot Print with LPR and FTP.**

- Turn the Illumina off and on again.
- Make sure there is a response to the ping command.
- Make sure the network cable is correctly connected.
- Change the cable and try again.
- Make sure the host name and IP address are configured in the workstation.
- Make sure the Illumina port name is configured in the workstation.
- There are three port names: lp, euc and sjis. Use lp by default as euc and sjis are specific to printers and digital color presses with PostScript available.

### **Incorrect User Name on the Banner Page.**

- If printing with lpr, the User name printed is unknown and the Filename printed is the Spool file name.
- If printing with FTP, the User name printed is the User name entered during FTP login and the File name printed is the Transmitted file name. If the Print Directory name is indicated in the put command, the File name is not printed. The Illumina name printed is the Logical Directory name.

## **Troubleshooting: NetBEUI**

### **The Network Interface Card is not identified**

- Turn the printer off for 15 seconds and then on again.
- Make sure the network cable is correctly connected.
- Change the cable and try again.
- Make sure the Microsoft network client and NetBEUI have been added to the network section of the control panel.
- Make sure the NetBEUI protocol is set to Enable.

- Make sure the factory setting of the work group name is PrintServer and the computer name is ML+ the last six digits of the MAC address.
- Make sure the computer name of the NIC is different from the computer name on the network.

### **Error writing to PRN1**

- Make sure the printer is online.
- If there is an error message indicating the paper has run out, add more paper to cancel the error.
- Check whether another user is printing. Print after the other user has finished.

### **Troubleshooting: TCP/IP**

#### **Blank pages or garbled text printed**

##### **Symptoms:**

When printing via a USB or TCP/IP connection, you receive blank pages or pages printed with a line of garbled text.

##### **Cause:**

This issue is normally caused by the data being sent to the printer in binary format. The printer may not be able to understand data in this format, and therefore may print blank pages or garbled text.

##### **Solution:**

In your application's print options, there may be an option to send data as ASCII. Choose this option, and print your document.

For example, in Adobe Photoshop 7 or Adobe Photoshop CS:

1. Click the file menu and select Print with Preview.
2. Click the box Show More Options.
3. From the pop-up menu, choose Output.
4. From the pop-up menu Encoding, choose ASCII.

#### **Banner print is rotated by 90 degrees and printed at bottom of paper Mac OS X 10.2.3 or Greater**

##### **Possible causes and solutions:**



Not enough RAM in the printer to process the print job. Try printing at a lower resolution.

Incorrect custom paper size being specified. Ensure that the Custom Paper Size in both the printer driver and your application are exactly the same.

Mac OS 10.2.3 - 10.2.8 only

The print job may have been rotated by your application. An anomaly in the core Mac OS X 10.2.x causes custom paper sizes to be incorrectly rotated by 90 degrees, the Ilumina PPD file implements a counter-rotation to solve this problem. However, some applications such as Quark Xpress or Macromedia Freehand may create their own PostScript code. For these applications, the customer paper size rotation issue does not apply.

In such cases, if the Ilumina PPD file is selected in Quark or Freehand's print dialogue, the print job will be incorrectly rotated by 90 degrees.

The Ilumina printer driver contains a page rotation option - this may be used to fix the program. Alternatively, you may be able to rotate the page in your application program.

## **No printing or print queue stopped**

### **Symptoms:**

Upon sending a job to the printer, the job disappears completely and is not printed, or the job remains stalled in Printer Setup Utility (Print Center).

### **Cause:**

The Ilumina PPD file has a dependency on a filter file. This filter file must be installed at the following locations.

**/Library/Printers/Xante/Filters/XTJAfilter**

If this file is deleted, or is not present on your computer, jobs will not be sent to the printer. This can happen if you deleted this filter file or if you copied a PPD file from another Mac and did not use the Ilumina installer.

### **Solution:**

Run the install software supplied with your printer. This will install the CUPS filter file and allow normal printing.

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## Appendix: The Illumina Menu

### Menu Basics

#### Top Level Functions

The top-level Functions menus are:

- Configuration (refer to Appendix B in the *User's Guide*)
- Print Information (refer to Appendix B in the *User's Guide*)
- Print Secure Job (refer to Appendix B in the *User's Guide*)
- Menus (refer to Appendix B in the *User's Guide*)
- Admin Setup: password protected (see “Admin Setup later in this Appendix”)
- Calibration (see “Calibration Menu” later in Appendix)
- Print Statistics: password protected (see “Illumina Statistics Menu” later in this Appendix)

#### Special Menu

- Boot Menu (see “Illumina Menu Boot Menu” later in this Appendix)

### Illumina Menu Overview

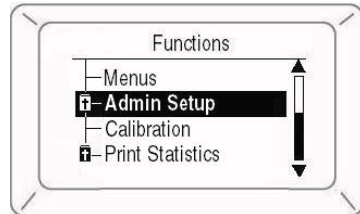
The following tables summarize the Admin Setup, Calibration, Print Statistics, and Boot Menu trees.

The remainder of the menus above are described in Appendix B of the on-line Illumina *User's Guide*.

#### Table Conventions Used

- The menu trees are given to the lowest menu item level. Typically, this can be a parameter that can be set by selecting from a range of values provided or a command that can be executed to display or print a status or setting value.
- Emboldened values are the defaults.
- Certain menus and items associated with options (for example, the optional trays) appear only if the associated hardware is installed or under certain conditions, as specified.

## Functions Menu Tree: Admin Setup, Calibration, Print Statistics



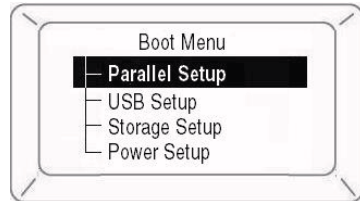
Function	Submenu 1	Submenu 2
Admin Setup (password protected)	Password (see “Password” later in this Appendix)	–
	Network Setup (see “Network Setup” later in this Appendix)	TCP/IP IPVersion NetBEUI NetWare EtherTalk Frame Type IP Address Set IP Address Subnet Mask Gateway Address Web Telnet FTP SNMP Network Scale Hub Link Setting Factory Defaults

Function	Submenu 1	Submenu 2
Admin Setup (cont.)	Print Setup (see “Print Setup” later in this Appendix)	Personality Copies Duplex Job Offset Output Bin Media Check Resolution Toner Save Mode Mono-print speed Default Orientation Form Length Edit Size Trapping X Dimension Y Dimension
	PS Setup (see “PS Setup” later in this Appendix)	Network Protocol Parallel Protocol USB Protocol
	PCL Setup (see “PCL Setup” later in this Appendix)	Font Source Font Number Font Pitch Symbol Set A4 Print Width White Page Skip CR Function LF Function Print Margin True Black Pen-width Adjust Tray ID#

Function	Submenu 1	Submenu 2
Admin Setup (cont.)	IBM PPR Setup (see “IBM PPR Setup” later in this Appendix)	Character Pitch Font Condense Character Set Symbol Set Letter O Style Zero Character Line Pitch White Page Skip CR Function LF Function Line Length Form Length TOF Position Left Margin Fit to Letter Text Height Continuous Paper Mode
	Epson FX Setup (see “Epson FX Setup” later in this Appendix)	Character Pitch Character Set Symbol Set Letter O Style Zero Character Line Pitch White Page Skip CR Function Line Length Form Length TOF Position Left Margin Fit to Letter Text Height Continuous Paper Mode
	Color Setup (see “Color Setup” later in this Appendix)	Ink Simulation UCR CMY 100% Density CMYK Conversion
	Memory Setup (see “Memory Setup” later in this Appendix)	Receive Buffer Size Resource Save
	Flash Memory Setup (see “Flash Memory Setup” later in this Appendix)	Initialize Resize PS Area

Function	Submenu 1	Submenu 2
Admin Setup (cont.)	HDD Setup (see “HHD Setup” later in this Appendix)	Initialize Resize Partition Format Partition
	System Setup (see “System Setup” later in this Appendix)	Near Life LED
	Change Password	New Password Verify Password
	Settings (see “Settings” later in this Appendix)	Reset Settings Save Settings
Calibration (see “Calibration Menu” later in this Appendix)	Auto Density Mode	ON OFF
	Auto BG Adjustg Mode	OFF:[-1...+2]
	Adjust Density	Execute
	Adjust Registration	Execute
	Heavy Media Adjust	OFF [-5...+5]
	Print Tuning Pattern	Execute
	Cyan Tuning	Highlight Mid-Tone Dark
	Magenta Tuning	Highlight Mid-Tone Dark
	Yellow Tuning	Highlight Mid-Tone Dark
	Black Tuning	Highlight Mid-Tone Dark
	Cyan Darkness	[-3...+3]
	Magenta Darkness	[-3...+3]
	Yellow Darkness	[-3...+3]
	Black Darkness	[-3...+3]

## Boot Menu Tree



## Parallel Setup

Item	Value	Description
Parallel	Enable Disable	Enables/Disables the Centronics interface.
Bi-Direction	Enable Disable	Enables/Disables the bi-directional Centronics interface.
ECP	Enable Disable	Enables/Disables the ECP mode
Ack Width	Narrow Medium Wide	Sets the ACK width for compatible reception. Narrow = 0.5 $\mu$ s Medium = 1.0 $\mu$ s Wide = 3.0 $\mu$ s
Ack/Busy Timing	Ack in Busy Ack while busy	Sets the order to output the BUSY signal and ACK signal for compatible reception.
I-Prime	3 microseconds 50 microseconds Disable	Sets the time to enable/disable the I-PRIME signal.
Offline Receive	Enable Disable	Enables/disables a function that maintains the receive-possible stat without changing an interface signal even though an alarm occurs. When this is set to Enable, the interface keeps the receive-possible status even when you press the Off-line operation panel switch. The interface sends the BUSY signal only when the reception buffer is full or a service call occurs.

## USB Setup

Item	Value	Description
USB	Enable Disable	Enables/Disables the USB interface.
Speed	480 Mbps 12Mbps	Sets the maximum SUB interface transfer speed.
Soft Reset	Enable Disable	Enables/Disables the Soft Reset command.
Offline Receive	Enable Disable	Enables/disables a function that maintains the receive-possible stat without changing an interface signal even though an alarm occurs. When this is set to Enable, the interface keeps the receive-possible status even when you press the Off-line operation panel switch. The interface sends the BUSY signal only when the reception buffer is full or a service call occurs.
Serial Number	Enable Disable	Enables/disables the USB serial number, used to identify a USB device to which a PC is connected.

## Security Setup

Item	Value	Description
Job Limitation	Off Encrypted Job	Controls the job limitation mode. If Encrypted Job is selected the printer will only allow this type of job to be printed and will discard all others.

## Storage Setup

Item	Value	Description
Check File System	Execute	Resolves any mismatch between actual memory and displayed memory available in a file system and preforms administration data (FAT information) recover. Performs these by file system. This function takes several tens of seconds to complete. HDD: Performs recover only for a HDD.



Item	Value	Description
Check All Sectors	Execute	Performs recover of a defective HDD sector information and a file system mismatch as mentioned above. It takes 30 to 40 minutes to complete this function for a HDD of 10GB.
Enable HDD	No Yes	Even if a machine is inoperable at installation because a HDD has been damaged, you can make the machine operable by setting to NO to signify that no HDD is attached, regardless of the existence of a HDD. While NO is set, access to a HDD results in FAIL because the HDD is regarded as not attached even if the HDD is operating normally.
Erase HDD	Execute	<p>Appears only when a HDD has been installed in the printer.</p> <p>This function erases all data from the disk. The data cannot be restored.</p> <p>Exiting the menu after a setting is made restarts the printer, starting erasing the disk. The percent progress of the erasing is displayed on the operation panel.</p> <p>Pressing Enter displays the following confirmation message:</p> <p>Are You Sure?</p> <p>- Yes</p> <p>- No</p> <p>Selecting No returns the display to the previous menu screen. By selecting Yes, the menu is immediately exited, the printer reboots, and the erasing operation starts. Pressing and holding the Cancel button during erasing displays the following confirmation message for cancellation of the erasing:</p> <p>Did You Cancel?</p> <p>-Yes</p> <p>-No</p> <p>Selecting No continues the erasing.</p> <p>Selecting Yes cancels the erasing, formats the disk and restarts the printer.</p>
Enable Initialization	No Yes	Prevents a setup change accompanying initialization of Block Device (HDD, FLASH).

## Power Setup

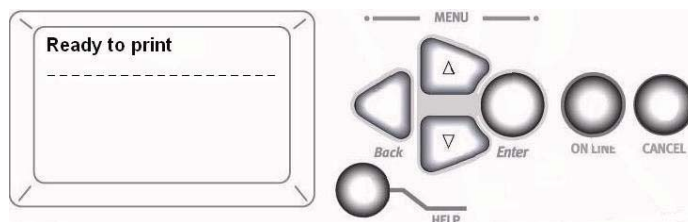
Item	Value	Description
Peak Power Control	Normal Low	The fuser of the printer as two lamps. When the lamps run on, the printer's power draw increases dramatically. Normal: Both lamps light at the same time. When this happens, the printer's power draw increases dramatically. Low: The lamps do NOT light at the same time, The printer's electrical draw increases, but not as dramatically.
Power Save	Enable Disable	Enables/disables the power save mode.
Moisture Control	On Off	Sets Off/On of Moisture Control mode. When On, the printer may take some time to complete printing the first-off sheet.

## Language Initialize Setup

Item	Value	Description
Execute	Yes No	

## Ilumina Menu Making Changes in the Menu

### Making Changes in the Function Menu



1. Ensure that the display panel indicates that the Ilumina is ready to print.

2. Press the Enter button to switch to the Menu mode.
3. Press the ▽ button to scroll down to the Function you wish to change, then press the Enter button.
4. Continue to use the ▽, △ and Enter buttons in a similar manner to drill down to the item you wish to change.
5. Use the ▽ and △ buttons to scroll to the setting you wish to engage, then press Enter. An Asterisk (\*) appears next to the new setting.
6. Press the Online button to exit menu mode and return to the Ready to print status.

#### Example: Enabling FTP

1. Ensure that the display panel indicates that the Ilumina is ready to print.
2. Press the Enter button to switch to the Menu mode.
3. With [Configuration] highlighted, press the Enter button to select this menu.
4. Press the ▽ and/or △ buttons repeatedly until [Admin Setup] is highlighted.
5. Press the Enter button to select this item.
6. Press the ▽ and/or △ buttons to enter the first digit of the password, then press the Enter button.
7. Repeat the previous step for each digit of the password.
8. Press the Enter button to go into the [Admin Setup] menu.
9. With [Network Setup] highlighted, press the Enter button.
10. Press the ▽ and/or △ buttons repeatedly until [FTP] is highlighted.
11. Use the ▽ or △ buttons to highlight [Enable].
12. Press the Enter button to engage the setting. An Asterisk (\*) appears next to the new setting.
13. Press the Online button to exit menu mode and return to the Ready to print status.

## Making Changes in the Boot Menu

1. Turn the Illumina OFF.
2. Press and hold the Enter button while turning the Illumina back on: be sure to keep pressing the Enter button until [Initializing] appears on the display.
3. Use the ▽ and △ buttons to scroll to an entry and the Enter button to select the entry, until you reach the item you wish to change.
4. Use the ▽ and △ buttons to scroll down to the setting you wish to engage, then press the Enter button. An Asterisk (\*) appears next to the new setting.
5. Press the Online button to exit menu mode and return to the Ready to print status.

## Illumina Menu Functions List

### Admin Setup

#### Password

Item	Value	Description
Enter password	nnnn	Enter a password to enter the Administrator menu. The default password is aaaaaa (six “a’s”).

#### Network Setup

Item	Value	Description
TCP/IP	<b>Enable</b> Disable	Enables/Disables the TCP/IP protocol.
IP Version	IP v4 IP v4+v6 IP v6	Set up the IP Version. Display condition: TCP/IP protocol must be enables.
NetBEUI	<b>Enable</b> Disable	Enables/Disables the NETBEUI protocol.
NetWare	<b>Enable</b> Disable	Enables/Disables the NetWare protocol.

Item	Value	Description
EtherTalk	<b>Enable</b> Disable	Enables/Disables the EtherTalk protocol.
Frame Type	<b>Auto</b> 802.2 802.3 Ethernet II SNAP	Sets the frame type (NetWare).
IP Address Set	Auto <b>Manual</b>	Sets IP address setup method (TCP/IP).
IP Address	xxx.xxx.xxx.xxx	Sets the IP address (TCP/IP).
Subnet Mask	255.255.255.0	Sets the Subnet Mask (TCP/IP).
Gateway Address	xxx.xxx.xxx.xxx	Sets the Gateway (default router) address (TCP/IP).
Web	Enable Disable	Enables/Disables the Web/IPP (TCP/IP).
Telnet	Enable Disable	Enables/Disables Telnet (TCP/IP).
FTP	Enable Disable	Enables/Disables FTP (TCP/IP).
SNMP	Enable Disable	Enables/Disables SNMP of FTP (TCP/IP or NetWare).
Network Scale	Normal Small	<p><u>Normal</u>: Can work effectively even when connected to a HUB that has a spanning tree feature. However, Illumina start up time gets longer when computers are connected to two or three small LANs.</p> <p><u>Small</u>: Computers can cover from two or three small LANs to a large LAN, but it may not work effectively when it is connected to a HUB with a spanning tree feature.</p>
Hub Link Setting	<b>Auto Negotiate</b> 1000Base-T Full 100Base-T Full 100Base-T Half 10Base-T Full 10Base-T Half	Sets the hub linking method.
Factory Defaults?	Execute	Specifies whether to initialize the network menu.

## Print Setup

Item	Value	Description
Personality	<b>Auto</b> PostScript PCL IBM PPR EPSON FX	Selects a printer language.
Copies	1 ~ 999	Sets number of copies. Disabled for local print, except for demo data.
Duplex	ON <b>OFF</b>	Specifies duplex printing.
Binding	<b>LongEdge</b> ShortEdge	Specifies how to bind duplex printing.
Job Offset	<b>ON</b> OFF	Enables/Disables Job offset.
Output Bin	Facedown Faceup	Specifies where to eject prints.
Media Check	Enable Disable	Enables/Disables whether the Illumina checks that paper size required by the print data matches that of the tray. Only standard sizes can be checked.
Transparency Detect	<b>Auto</b> Disable	Enables/Disables the automatic detection of transparencies. (Use it while detecting sensor mistakes).
Resolution	600dpi 600x1200dpi 600dpi multi-level	Sets the resolution.
Toner Save Mode	ON <b>OFF</b>	Sets toner saving mode.
Mono-Print Speed	<b>Auto</b> Color speed Normal speed	Sets the monochrome print speed. <u>Auto</u> : prints at most appropriate speed for page. <u>Color speed</u> : always prints at color speed. <u>Normal speed</u> : always prints at monochrome speed.
Default Orientation	<b>Portrait</b> Landscape	Sets printing orientation (only for PCL, IBMPPR, EPSONFX). Invalid for PS.

Item	Value	Description
Form Length	5 ~ 60 (L) ~ 64 (A) ~ 128 lines	Sets the number of lines printable on one page (only for PCL). Invalid for PS. The emboldened default values given are for Letter (L) and A4 (A). In practice, the values change corresponding to the size of paper in the tray.
Edit Size	Cassette size Letter short edge Letter long edge Executive Legal 14 Legal 13.5 Legal 13 Tabloid Extra, Tabloid A3 Nobi, A3 wide, A3 A4 short edge A4 long edge A5, 6, B4 B5 short edge B5 long edge Custom Com-9 Envelope Com-10 Envelope Monarch Envelope DL Envelope Postcard Double postcard C5, C4 Index card	Specifies the size of an area to draw when there is no specification of a size by predefined paper edit size command from a host PC (only valid for PCL). Invalid for PS.
Trapping	Off Narrow Wide	Sets trapping.
X Dimension	3.0 ~ 8.5 ~ 12.9 inch (76 ~ 328 mm)	Sets default Custom paper width, perpendicular to the direction of motion of paper.
Y Dimension	3.5 ~ 11 ~ 47.2 inch (90 ~ 1200 mm)	Sets default Custom paper length, in the same direction as the direction of motion of paper.

## PS Setup

Item	Value	Description
Network Protocol	ASCII <b>RAW</b>	Specifies PS transmission protocol for network data. It does not appear for Non-PS type.
Parallel Protocol	<b>ASCII</b> RAW	Specifies PS transmission protocol for Centronics data. It does not appear for Non-PS type.
USB Protocol	ASCII <b>RAW</b>	Specifies PS transmission protocol for USB data. It does not appear for Non-PS type.

## PCL Setup

Item	Value	Description
Font Source	<b>Resident</b> Resident2 Downloaded	Specifies the location of the PCL default font. <b>RESIDENT2</b> : displayed only when Heisei Font is installed. <b>DOWNLOADED</b> : displayed when software font is downloaded to RAM as permanent designation. Fonts downloaded to Flash and HDD by PJL command are not displayed in this menu.
Font Number	<b>10</b> C1 S1	Sets the PCL font number.
Font Pitch	0.44 ~ 99.99 CPI Default <b>10.00 CPI</b>	Sets the width of the PCL default fonts.
Font Height	4.00 ~ 999.75 point Default <b>12.00 point</b>	Sets the height of the PCL default font.



Item	Value	Description
Symbol Set	PC-8, PC-8 Dan/Nor PC-8, TK, PC-775, PC-850, PC-852, C-855, PC-857 TK, PC-858, PC-864L/A, PC-866, PC-869, PC-1004, Pi Font, Plska Mazvia, PS Math, PS Text, Roman-8, Roman-9, Roman Ext, Serbo Croat1, Serbo Croat2, Spanish Ukrainian, VN Int'l, VN Math, VN US, Win 3.0, Win 3.1 Blt, Win 3.1 Cyr, Win 3.1 Grk, Win 3.1 Heb, Win 3.1 L1, Win 3.1 L2, Win 3.1 L5, Wingdings Dingbats MS Symbol, OCR-A, OCR-B, HP ZIP, USPSFIM, USPSSTP, USPSZIP, Bulgarian, CWI Hung DeskTop German, Greek-437, Greek-437 Cy Greek-737, Greek-928, Hebrew NC Hebrew OC, IBM-437, IBM-850, IBM-860, IBM- 863, IBM-865, ISO Dutch, ISO L1, ISO L2, ISO L5, ISO L6, ISO L9, ISO Swedish1, ISO Swedish2, ISO Swedish3, ISO- 2 IRV, ISO-4 UK, ISO-6 ASC, ISO-10 S/F ISO-11 Swe, ISO-14 JASC, ISO-15 Ita, ISO-16 Por, ISO-17 Spa, ISO-21 Ger, ISO-25 Fre, ISO-57 Chi, ISO-60 Nor, ISO-61 Nor, ISO-69 Fre, ISO-84 Por, ISO-85 Spa Kamenicky Legal, Math-8, MC Text, MS Publish, PC Ext D/N, PC Ext US, PC Set1, PC Set2 D/N , PC Set2 US, WIN3.1J	
A4 Print Width	<b>78 column</b> 80 column	Sets line width subject to Auto LF with A4 paper in PCL.
White Page Skip	<b>OFF</b> ON	Sets to eject a page with non-print data (blank page) on receipt of the FF command (0CH) in PCL. Set to OFF for ejection.
CR Function	<b>CR</b> CR+LF	Sets the operation on receipt of a CR code in PCL. (NL means new line).
LF Function	<b>LF</b> LF+CR	Sets the operation on receipt of a LF code in PCL. (NL means new line).
Print Margin	<b>Normal</b> 1/5 inch 1/6 inch	Sets the margin for paper printable area.
True Black	<b>OFF</b> ON	Sets use in PCL of Composite Black (mixed color of CMKY) or Pure Black (only K) for black (100%). <b>OFF</b> : Sets Composite Black. <b>ON</b> : Sets Pure Black. Invalid for PS.
Pen Width Adjust	<b>ON</b> OFF	The thinnest line width in PCL, a 1-dot line, may look broken. ON: when the thinnest line width is specified, line width is emphasized to look wider. OFF: the line appears as specified.

Item	Value	Description
Tray ID# – Tray2 – Tray3 – Tray4 – Tray5	1 ~ <b>5</b> ~ 59 1 ~ <b>20</b> ~ 59 1 ~ <b>21</b> ~ 59 1 ~ <b>22</b> ~ 59	Sets the number to specify Tray2, Tray3, Tray4, and Tray5 for the paper feed destination command in PCL5e emulation.
– MP Tray	1 ~ <b>4</b> ~ 59	Sets the number to specify MP Tray for the paper feed destination command in PCL5e emulation

## IBM PPR Setup

Item	Value	Description
Character pitch	10CPI, 12CMI, 17CPI, 20CPI, Proportional	Sets the character pitch
Font condense	12 to 20 CPI 12 to 12CPI	Ses the 12CPI pitch for Condensed printing mode.
Character set	SET-2, SET-1	Sets the character set to be used.
Symbol Set	IBM-437, IBM-850, IBM-860, IBM-863, IBM-865, PC Set1, PC Ext US, PC Ext D/N, PC Set2 US, PC Set2 D/N, Roman-8, ISO L1, PC-8, PC-8 Dan/Nor, PC-850, Legal, ISO-2 IRV, ISO-4 UK, ISO-6 ASC, ISO-10 S/F, ISO-11 Swe, ISO-14 JASC ISO-15 Ita. ISO-16 Por. ISO-17 Spa. ISO-21 Ger. ISO-25 Fre. ISO-57 Chi. ISO-60 Nor, ISO-61 Nor, ISO-69 Fre, ISO-84 Por, ISO-85 Spa, German, Spanish, ISO Dutch, Roman Ext, ISO Swedish1, ISO Swedish2, ISO Swedish3, VN Math, VN Int'l, VN US, PS Math, PS Text, Math-8, Pi Font, MS Publish, Win 3.0, DeskTop, Win 3.1 L1, MC Text, PC-852, Win 3.1 L5, Win 3.1 L2, CWI Hung, PC-857 TK, ISO L2, ISO L5, PC-8 TK, Kamenicky, Hebrew NC, Hebrew OC, Plska Mazvia, ISO L6, Win 3.1 Heb, Win 3.1 Cyr, PC-866, Win 3.1 Grk, PC-869, PC-855, Greek-437, Greek-437 Cy, Greek-737, Greek-928, Serbo Croat2, Ukrainian, Bulgarian, PC-1004, Win 3.1 Blt, PC-775, Serbo Croat1, PC-858, Roman-9, ISO L9	
Letter O style	Enable Disable	Sets the letter O style.
Zero character	Normal Slashed	Set to O style.
Line pitch	6LPI 8LPI	Sets the line pitch
White page skip	OFF ON	Sets whether a blank sheet is ejected.

Item	Value	Description
CR function	CR CR+LF	Sets the action when the CR code is received.
LF function	LF LF+CR	Set the action when the LF code is received.
Line length	80 column 136 column	Sets the number of characters per line.
Form length	11 inch 11.7 inch 12 inch	Sets the paper length.
TOF position	0.0 inch 0.1 ~ 1.0 inch	Sets the print position from the top edge of the paper.
Left margin	0.0 inch 0.1 ~ 1.0 inch	Sets the print position from the left edge of the paper.
Fit to letter	Enable Disable	Set the print mode that fits print data equivalent to 11 inch (66 lines) into Letter size printable area.
Text height	Same Diff	Set character height. Same: same height, regardless of CPI. Diff: character heights vary according to CPI.
Cont paper mode	ON OFF	Sets the edit direction of paper supported by A3 printer to landscape.

## Epson FX Setup

Item	Value	Description
Character pitch	10CPI, 12CMI, 17CPI, 20CPI, Proportional	Sets the character pitch
Character set	SET-2, SET-1	Sets the character set to be used.

Item	Value	Description
Symbol Set	IBM-437, IBM-850, IBM-860, IBM-863, IBM-865, PC Set1, PC Ext US, PC Ext D/N, PC Set2 US, PC Set2 D/N, Roman-8, ISO L1, PC-8, PC-8 Dan/Nor, PC-850, Legal, ISO-2 IRV, ISO-4 UK, ISO-6 ASC, ISO-10 S/F, ISO-11 Swe, ISO-14 JASC, ISO-15 Ita, ISO-16 Por, ISO-17 Spa, ISO-21 Ger, ISO-25 Fre, ISO-57 Chi, ISO-60 Nor, ISO-61 Nor, ISO-69 Fre, ISO-84 Por, ISO-85 Spa, German, Spanish, ISO Dutch, Roman Ext, ISO Swedish1, ISO Swedish2, ISO Swedish3, VN Math, VN Int'l, VN US, PS Math, PS Text, Math-8, Pi Font, MS Publish, Win 3.0, DeskTop, Win 3.1 L1, MC Text, PC-852, Win 3.1 L5, Win 3.1 L2, CWI Hung, PC-857 TK, ISO L2, ISO L5, PC-8 TK, Kamenicky, Hebrew NC, Hebrew OC, Plska Mazvia, ISO L6, Win 3.1 Heb, Win 3.1 Cyr, PC-866, Win 3.1 Grk, PC-869, PC-855, Greek-437, Greek-437 Cy, Greek-737, Greek-928, Serbo Croat2, Ukrainian, Bulgarian, PC-1004, Win 3.1 Blt, PC-775, Serbo Croat1, PC-858, Roman-9, ISO L9	
Letter O style	Enable Disable	Sets the letter O style.
Zero character	Normal Slashed	Set to O style.
Line pitch	6LPI 8LPI	Sets the line pitch
White page skip	OFF ON	Sets whether a blank sheet is ejected.
CR function	CR CR+LF	Sets the action when the CR code is received.
Line length	80 column 136 column	Sets the number of characters per line.
Form length	11 inch 11.7 inch 12 inch	Sets the paper length.
TOF position	0.0 inch 0.1 ~ 1.0 inch	Sets the print position from the top edge of the paper.
Left margin	0.0 inch 0.1 ~ 1.0 inch	Sets the print position from the left edge of the paper.
Fit to letter	Enable Disable	Set the print mode that fits print data equivalent to 11 inch (66 lines) into Letter size printable area.
Text height	Same Diff	Set character height. Same: same height, regardless of CPI. Diff: character heights vary according to CPI.

Item	Value	Description
Cont paper mode	ON OFF	Sets the edit direction of paper supported by A3 printer to landscape.

## Color Setup

Item	Value	Description
Ink Simulation	<b>OFF</b> SWOP Euroscale Japan	Simulates a standard printing color by the Illumina. The function is valid only for jobs using PS languages.
UCR	<b>Low</b> Medium High	Sets toner layer thickness. (Medium or Low may help reduce any paper curl that occurs.)
CMY 100% Density	Enable <b>Disable</b>	Enable/disable 100% output against CMY100% TRC compensation. Selecting ENABLE will enable 100% output in individual color. The actual print, including the TRC compensation function is limited to an appropriate area. This function is for a special purpose such as specification in CMYK color diminution of PS.
CMYK Conversion	<b>ON</b> OFF	Set to OFF to simplify the conversion process of CMYK data and reduce the processing time. This setting is ignored when the Ink Simulation function is used.

## Memory Setup

Item	Value	Description
Receive Buffer Size	<b>Auto</b> 0.5 MB 1 MB 2 MB 4 MB 8 MB 16 MB 32 MB	Sets the size of the receive buffer.

Item	Value	Description
Resource Save	Auto <b>Off</b> 0.5 MB 1 MB 2 MB 4 MB 8 MB 16 MB 32 MB	Sets the size of the resource saving area.

## Flash Memory Setup

Item	Value	Description
Initialize	Execute	Initializes resident flash memory.
Resize PS Area	nn% [n.n MB]	Sets the size of the PS area in resident flash memory.

## HDD Setup

Item	Submenu Item	Value	Description
Initialize	Execute		Initializes the HDD to the factory default state.
Resize Partition	PCL Common PS	nn% mm% ll%	Sets partition size.
Format Partition	PCL Common PS	—	Sets the format of a specified partition.

## System Setup

Item	Value	Description
Near Life LED	<b>Enable</b> Disable	Enables the Attention LED to be turned on when a warning for NEAR LIFE of a toner, a drum, a fuser, or a belt occurs.

## Change Password

Item	Value	Description
New Password	nnnn	Sets a new password to enter Admin Setup.
Verify Password	nnnn	Lets a user verify the new password to be used to enter Admin Setup.

## Settings

Item	Value	Description
Reset Settings	Execute	Resets EEPROM of the CU. Returns a user's menu setup to the factory default state.
Save Settings	Execute	Saves the current menu settings.
Restore settings	Execute	Changes the menu settings saved.

## Calibration Menu

Item	Value or Submenu Item	Value	Description
Auto Density Mode	<b>ON</b> OFF	—	Sets whether density adjustment and TRC compensation is automatically performed. <u>ON</u> : density adjustment is automatically run under the Illumina specified conditions and reflected in TRC compensation. <u>OFF</u> : the Illumina does not carry out density adjustment automatically.
Auto BG adjust mode	Off [-1...+2]	-	Prevents dirty print backgrounds caused by unstable toner charging conditions. The print density sensor detects the toner electric potentials and automatically adjusts supply voltage (SB) and charging voltage (CH). The menu does not appear when auto density mode is set to OFF.

Item	Value or Submenu Item	Value	Description
Adjust Density	Execute	–	When Execute is selected, the Ilumina carries out density compensation immediately and reflects it in TRC compensation. Density adjustment must be carried out when the Ilumina is idling.
Adjust Registration	Execute	–	When Execute is selected, the Ilumina carries out registration adjustment automatically. Registration adjustment must be carried out when the Ilumina is idling.
Heavy media adjust	Off [-5...+5]		Adjusts the fusing speeds for printing on heavy media. A value other than OFF adjusts the speed based on the automatic-adjustment value that has been set.
Print Tuning Pattern	Execute	–	Allows you to print a pattern to help you adjust TRC manually. (Normally, TRC is automatically adjusted to the recommended levels through density adjustment and TRC compensation.)
Cyan Tuning Magenta Tuning Yellow Tuning Black Tuning	Highlight	[-3...+3]	Adjusts highlight (light area) of Cyan, Magenta, Yellow, or Black TRC. Plus indicates adjustment towards darker and minus towards lighter.
	Mid-Tone	[-3...+3]	Adjusts mid tone of Cyan, Magenta, Yellow, or Black TRC. Plus indicates adjustment towards darker and minus towards lighter.
	Dark	[-3...+3]	Adjusts dark (dense area) of Cyan, Magenta, Yellow, or Black TRC. Plus indicates adjustment towards darker and minus towards lighter.
Cyan Darkness Magenta Darkness Yellow Darkness Black Darkness	[-3...+3]	-	Adjusts the engine density. The darkness settings are offset (additional) values on the results of the adjustments made with the Adjust Density or Tuning functions.



## Print Statistics Menu

Item	Value	Description
Password entry	nnnn	Enter password. The default password is <b>0000</b> (four zeroes). When there is no support for the print statistics function, Print Statistics is not displayed.
Statistics log	Enable <b>Disable</b>	Enables/Disables the print statistics function.
Log Size	1 ~ 30 ~100	Sets the log size. Conditions for display: - HDD is installed. - Enable is selected in <b>Functions &gt; Print Statistics &gt; Statistics Log</b> .
Reset counter	Execute	Clears the counter back to zero. Conditions for display: Enable is selected in <b>Functions &gt; Print Statistics &gt; Statistics Log</b> .
Change password	-	Sets a new password to enter the Print Statistics menu.
New password	nnnn	Input the new password again to confirm.
Verify password	nnnn	

## Ilumina Menu Boot Menu

To access the Boot Menu:

1. Turn the Ilumina off.
2. Press and hold the Enter key while turning the Ilumina back on: *be sure to continue holding the Enter key until “Initializing” appears on the display.*

## Parallel Setup

Item	Value	Description
Parallel	<b>Enable</b> Disable	Enables/Disables the Centronics interface.
Bi-Direction	<b>Enable</b> Disable	Enables/Disables the bi-directional Centronics interface.

Item	Value	Description
ECP	<b>Enable</b> Disable	Enables/Disables the ECP mode.
Ack Width	<b>Narrow</b> Medium Wide	Sets the ACK width for compatible reception. Narrow = 0.5μs. Medium = 1.0μs. Wide = 3.0μs
Ack/Busy Timing	<b>Ack in Busy</b> Ack while Busy	Sets order to output the BUSY and ACK signals for compatible reception.
I-Prime	3 microseconds 50 microseconds <b>Disable</b>	Sets the time to enable/disable the I-PRIME signal.
Offline Receive	Enable <b>Disable</b>	When this is set to Enable, the interface keeps the receive-possible state even when you press the Off-line operating panel switch. The interface sends the BUSY signal only when the reception buffer is full or a service call occurs. PS only.

## USB Setup

Item	Value	Description
USB	<b>Enable</b> Disable	Enables/Disables the USB interface.
Speed	<b>480Mbps</b> 12Mbps	Sets the maximum USB interface transfer speed.
Soft Reset	Enable <b>Disable</b>	Enables/Disables the Soft Reset command.
Offline Receive	Enable Disable	When this is set to Enable, the interface keeps the receive-possible state even when you press the Offline operating panel switch. The interface sends the BUSY signal only when the reception buffer is full or a service call occurs. PS only.
Serial Number	<b>Enable</b> Disable	Enables/Disables the USB serial number, used to identify a USB device to which a PC is connected.

## Security Setup

Item	Value	Description
Job Limitation	Off Encrypted Job	Controls the job limitation mode. If Encrypted Job is selected the printer will only allow this type of job to be printed and will discard all others.

## Storage Setup

Item	Value	Description
Check File System	Execute	Resolves any mismatch between actual memory and displayed memory available in a file system and performs administration data (FAT information) recovery. Performs these by file system. This function takes several tens of seconds to complete. <u>HDD</u> : Performs recovery only for HDD.
Check All Sectors	Execute	Performs recovery of a defective HDD sector information and a file system mismatch as mentioned above. It takes 30 to 40 minutes to complete this function for an HDD of 10GB.
Enable HDD	No Yes	Even if a machine is inoperable at installation because an HDD has been damaged, you can make the machine operable by setting to NO to signify that no HDD is attached, regardless of the existence of an HDD. While NO is set, access to an HDD results in FAIL because the HDD is regarded as not attached even if the HDD is operating normally.

Item	Value	Description
Erase HDD	Execute	<p>Appears only when a HDD has been installed in the printer.</p> <p>This function erases all data from the disk. The data cannot be restored.</p> <p>Exiting the menu after a setting is made restarts the printer, starting erasing the disk. The percent progress of the erasing is displayed on the operation panel.</p> <p>Pressing Enter displays the following confirmation message: Are You Sure?</p> <p>- Yes - No</p> <p>Selecting No returns the display to the previous menu screen. By selecting Yes, the menu is immediately exited, the printer reboots, and the erasing operation starts. Pressing and holding the Cancel button during erasing displays the following confirmation message for cancellation of the erasing: Did You Cancel?</p> <p>-Yes -No</p> <p>Selecting No continues the erasing. Selecting Yes cancels the erasing, formats the disk and restarts the printer.</p>
Enable Initialization	No Yes	Prevents a setup change accompanying initialization of Block Device (HDD, FLASH).

## Power Setup

Item	Value	Description
Peak Power Control	Normal Low	<p>The fuser of the printer has two lamps. When the lamps run on, the printer's power draw increases dramatically.</p> <p>Normal: Both lamps light at the same time. When this happens, the printer's power draw increases dramatically.</p> <p>Low: The lamps do NOT light at the same time, The printer's electrical draw increases, but not as dramatically.</p>
Power Save	Enable Disable	Enables/disables the power save mode.

Item	Value	Description
Moisture Control	On Off	Sets Off/On of Moisture Control mode. When On, the printer may take some time to complete printing the first-off sheet.

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