

C920WT/ES9420WT

OKI



Network Guide



CONNECTIVITY



INFORMATION

PREFACE

Every effort has been made to ensure that the information in this document is complete, accurate, and up-to-date. The manufacturer assumes no responsibility for the results of errors beyond its control. The manufacturer also cannot guarantee that changes in software and equipment made by other manufacturers and referred to in this guide will not affect the applicability of the information in it. Mention of software products manufactured by other companies does not necessarily constitute endorsement by the manufacturer.

While all reasonable efforts have been made to make this document as accurate and helpful as possible, we make no warranty of any kind, expressed or implied, as to the accuracy or completeness of the information contained herein.

The most up-to-date drivers and manuals are available from the Oki web site:
<http://www.okiprintingsolutions.com>

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NOTES, CAUTIONS AND WARNINGS

NOTE

A note provides additional information to supplement the main text.

CAUTION!

A caution provides additional information which, if ignored, may result in equipment malfunction or damage.

WARNING!

A warning provides additional information which, if ignored, may result in a risk of personal injury.

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INTRODUCTION

NOTE

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

The OkiLAN Internal Print Server is a fast 10BASE-T/100BASE-TX/1000Base-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, EtherTalk (Mac) and NetBEUI (Windows).

The print server has a number of security features, including SSL/TLS, IP Filtering, disabling unused protocols, etc.

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

NOTE

Change the emulation in the Printer Menu settings to Auto or PS before printing the network summary.

SECTIONS

This book is divided into the following sections:

- > "Section 1: configuring the print server" on page 12
- > "Section 2: utilities" on page 47
- > "Section 3: printing from Windows" on page 51
- > "Section 4: printing using MacOS" on page 55
- > "Section 5: troubleshooting" on page 80

SPECIFICATIONS

Frame types	<ul style="list-style-type: none"> • IEEE 802.2 • IEEE 802.3 • Ethernet-II, SNAP, AUTO
Network interface	<ul style="list-style-type: none"> • 1000BASE-T • 100BASE-TX • 10BASE-T
Network protocols	<ul style="list-style-type: none"> • TCP/IP <ul style="list-style-type: none"> – Network layer: ARP, RARP, IP, ICMP, PnP – Session layer: TCP, UDP – Application layer: PR, FTP, TELNET, HTTP, IPP, BOOTP, DHCP, SNMP, DNS, SMTP, POP3 • IPX/SPX (NetWare) <ul style="list-style-type: none"> – Remote printer mode (up to eight file servers and 32 queues) – Print server mode (up to eight print servers) – Encrypted password supported in print server mode – SNMP • EtherTalk:ELAP, AARP, DDP, AEP, NBP, ZIP, RTMP, ATP, PAP • AppleTalk • Bonjour • NetBEUI: SMB, NetBIOS
Print Service	<ul style="list-style-type: none"> • LPR • FTP • Port 9100 • Web Direct Printing • QSERVER Binder • QSERVER NDS
Functions	<ul style="list-style-type: none"> • Self-diagnostic test printing • Banner supported • Monitoring/configure by Web browser • Printer status notification by E-Mail

NETWORK SUMMARY PRINTOUT

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

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

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

General Information

Network Function Name	OkiLAN 8200e
MAC Address	01:23:45:14:32:32
HUB Link Setting	Auto Negotiation
HUB Link Status	OK 100BASE-TX 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 OkiLAN print servers.

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

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

NOTE

If anything other than "OK" is displayed see [page 81](#).

CONFIGURATION METHODS

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

UTILITY	FEATURES	SYSTEM REQUIREMENTS
Quick Setup (see page 13)	Configure the print server easily and simply without installing any software packages into your system. You can set the following: <ul style="list-style-type: none">• Enable/disable TCP/IP, EtherTalk, NetBEUI protocols.• Set IP address, Subnet Mask and Gateway for TCP/IP manually or by using DHCP.• Zone name and Port name for EtherTalk.	Windows* <ul style="list-style-type: none">• 7• Vista• XP * with TCP/IP protocol or IPX/SPX protocol installed. Mac OS X 10.4 - 10.6
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.

SECTION 1: CONFIGURING THE PRINT SERVER

This section explains the various ways you can configure your print server.

It consists of the following:

- > ["Using the adminmanager quick setup" on page 13](#)
- > ["Using a web browser" on page 16](#)
- > ["Using adminmanager standard setup" on page 21](#)
- > ["Using TELNET" on page 45](#)

USING THE ADMINMANAGER QUICK SETUP

INTRODUCTION

NOTE

- > *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 printer.*
-

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 Network & Utilities CD into the CD-ROM drive and wait for it to autorun.

If the installer does not start automatically, click **Start > Run** and enter **E:\Setup** (where E is your CD-ROM drive) in the Open field, then click **OK**.

2. Select the appropriate language.
3. Accept the Software License Agreement if you have not previously accepted it.

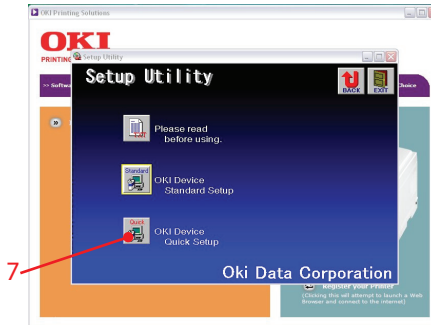
NOTE

Installation enables the user to create network queues and perform other functions.

4. Navigate to and select **Network Software**.
5. Select **Install Network Card Setup Utility** link.
6. If required, select the appropriate language.



7. Select **Oki Device Quick Setup** and follow the on-screen instructions.



8. 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.

9. Click **Finish** to validate the new settings.

The print server re initialises.

USING A WEB BROWSER

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

NOTE

The network addresses used in this manual are shown for example only. Network addresses used in your installation should be within in 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

NOTE

The following illustrations are from Microsoft Internet Explorer.

- 1.** Have a copy of the network summary printout to hand (see [page 10](#)).
 - >** 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 Printer Status window displays.

NOTE

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:

5. To ensure correct operation, change the browser cache or temporary internet settings to ensure the latest version is viewed at each session. For example, using Internet Explorer:
 - (a) In the Tools pull-down menu, select **Internet Options**.
 - (b) On the General tab, under **Temporary Internet files**, click **Settings....**
 - (c) Under **Check for newer versions of stored programs**, select **Every visit to the page**.
 - (d) Click **OK**.
-

NOTE

*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 displays.

- Enter "**root**" for the **User Name** and your password—the default is the last six digits of the MAC address (case sensitive, use uppercase)—under **Password**.



- Click **OK**.
- Click **Skip** to navigate to the main menu page.

OKI
PRINTING SOLUTIONS

My Printer

Status
Printer Status: **ONLINE** Refresh Status Window

Printer Information

Printer Information	Unit Service	Enabled
Printer Name: OKI-XXXX-CDDEA4	LPR	●
IP Address: 192.168.0.2	Port9100	●
MAC Address: 01:23:45:CB:DE:A4	FTP	○
Printer Location: AA71009812	IPP	○
Printer Serial Number: AA71009812	NetWare Printer	●
Printer Asset Number: -	NetWare RPrinter	○
Contact Name: Administrator	EtherTalk	●
	NetBEUI	●
	Settings Service	Enabled
	SNMP	●
	WEB	●
	Telnet	○
	NetBEUI	●

Printer Information

Tray1	A4 LEF
MPTray	A4 BEF
Duplex	Installed
Hard Disk	Installed
Memory	256 MB

Printer Information

CU	E1.09
PU	00.00.32
Network Firmware	06.51
Web Remote	W6.51
Web Language	W6.51

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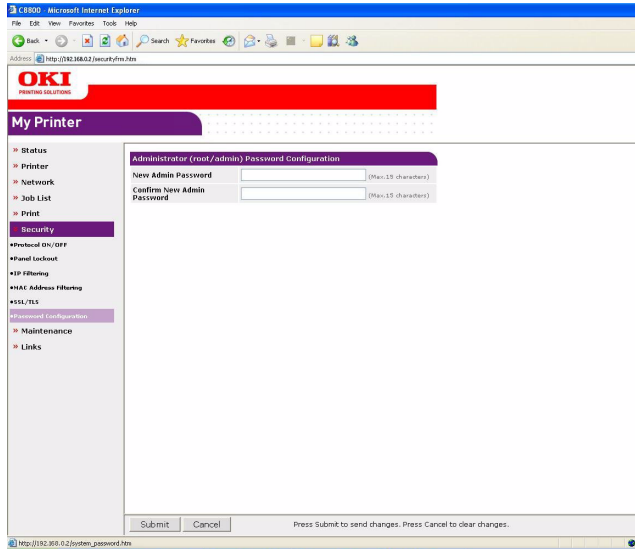
- 11.** In the left column, click the category for which you wish to make changes.
- 12.** When you are finished, click **Submit** to send the changes to the print server.

NOTE

For information on setting up security features using the web browser refer to the Security Guide.

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**.

NOTE
Maximum 15 characters.

4. Click **Submit** to save the changes or **Cancel** to exit.

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.

NOTE

- > *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 printer.*
-

INSTALLING ADMINMANAGER

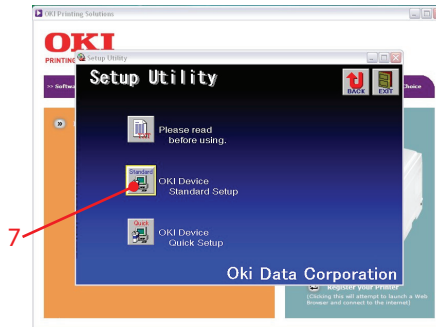
1. Insert the Network & Utilities CD into the CD-ROM drive and wait for it to autorun.

If the installer does not start automatically, click **Start > Run** and enter **E:\Setup** (where E is your CD-ROM drive) in the Open field, then click **OK**.

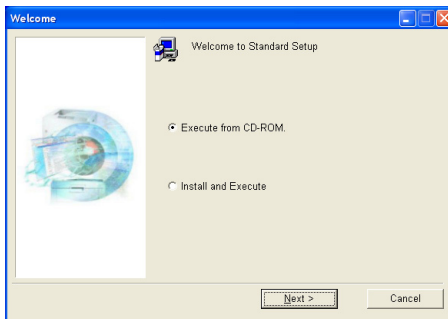
2. Select the appropriate language.
3. Accept the Software License Agreement if you have not previously accepted it.
4. Navigate to and select **Network Software**.
5. Select **Install Network Card Setup Utility** link.
6. If required, select the appropriate language.



7. Click Oki Device Standard Setup.



The Welcome window displays.



Here you can choose:

- > run the utility from the CD **Execute from CD-ROM**
- > load the utility onto your hard drive and run it from there **Install and Execute**

8. Click Next.

- (a) If you selected **Install and Execute**, follow the on-screen instructions to install AdminManager, then see the ["The AdminManager interface" on page 24.](#)
- (b) If you selected **Execute from CD-ROM**, see the ["The AdminManager interface" on page 24.](#)

THE ADMINMANAGER INTERFACE

NOTE

*To open the standard version of AdminManager from your desktop, click **Start > Programs > OKI Setup Utility > Admin Manager.***

PULL-DOWN MENUS

FILE MENU

- > **Search**
Locates and lists all printers in your network which have an Oki compatible network card installed.
- > **Exit**
Exit the program.

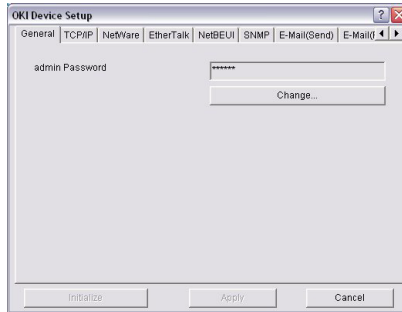
STATUS MENU

- > **Printer Status**
Displays the current status of the printer.
- > **System Status**
Displays the current network card configuration. The configuration data can be saved as a log file.
- > **List of Configuration Items**
Displays current configuration. Configuration data can be saved as a log file.

SETUP MENU

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

General Tab (Oki Device Setup)



The General tab allows you to change the admin password.

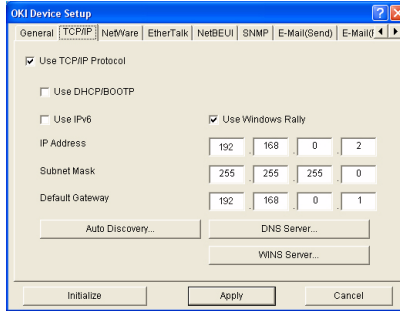
1. Click **Change**.
2. Enter the current value, then enter the new value and re-enter it under **Confirm**

NOTE

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 01:23:45:A4:55:79, the password would be A45579.

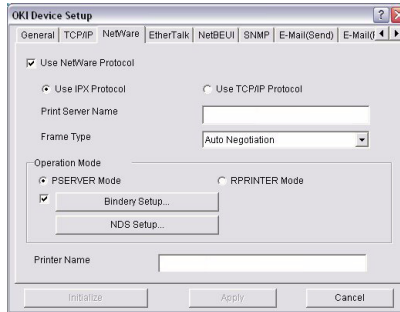
3. Click **OK**.

TCP/IP Tab (Oki 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 or later: 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 Bonjour, 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.

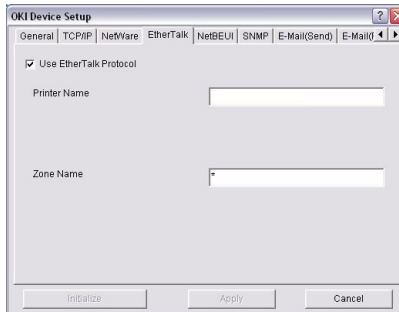
Netware Tab (Oki Device Setup)



ITEM	COMMENTS	
Use NetWare Protocol	Enable/disable NetWare protocol.	
Use IPX Protocol	Click to deselect if you do not wish to use IPX.	
Use TCP/IP Protocol	Click this 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.	
Bindery Setup	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 Setup	Set the NDS Tree and Context where the Print Server was created.	

ITEM	COMMENTS	
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 (Oki 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 (Oki Device Setup)

The screenshot shows the 'Oki Device Setup' dialog box with the 'NetBEUI' tab selected. The 'Use NetBEUI Protocol' checkbox is checked. The 'Short Printer Name' field is empty. The 'Workgroup' field contains 'PrintServer'. The 'Comment' field contains 'EthernetBoard OKILAN 8450e'. The 'Initialize', 'Apply', and 'Cancel' buttons are visible at the bottom.

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 (Oki Device Setup)

ITEM	COMMENTS	
Use SNMP Service	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 printer 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: Printer Reboot Receive Illegal Online Offline Paper Out Paper Jam Cover Open Printer Error
	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: Online Offline Paper Out Paper Jam Cover Open Printer Error

E-mail(Send) Tab

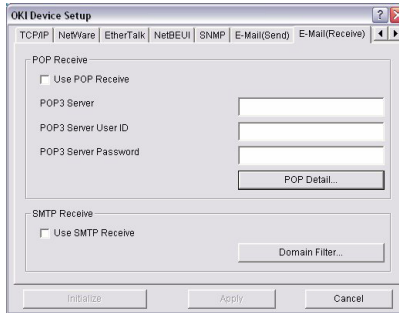
ITEM	COMMENTS	
Use SMTP Transmit	Enable/disable sending E-mail using SMTP.	
SMTP Server Name	Set the host name of the SMTP server.	
Printer E-mail Address	Set the E-mail address that is used in the [From] field in the mail header.	
Destination Address 1... through 5...	Set the following parameters:	
	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 is settable in hours and/or minutes (0, 15, 30, or 45).	
Attach Info...	Select whichever information is to be included in the E-mail.	

ITEM	COMMENTS	
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:	
	Use SMTP Authentication	Enable/disable SMTP authentication.
	User ID	Set the user ID for authentication.
	User Password	Set a password for authentication.
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 (Oki Device Setup)

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

Not all printers support this function. If the email receive tab is not displayed, your printer does not support this function.



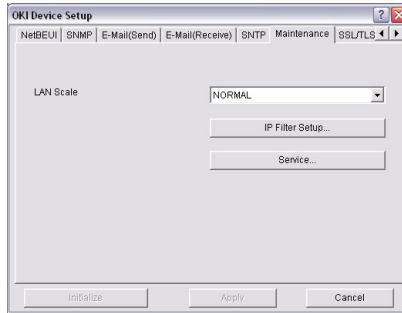
ITEM	COMMENTS	
Use POP Receive	Enable/disable receiving E-Mail via POP3.	
POP3 Server	Set the IP address or host name of the POP3 server.	
POP3 Server User ID	Set User ID for POP3 server.	
POP3 Server Password	Set a password for the POP3 server.	
POP Detail...	Set the following:	
	Use APOP	Select if 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.	

ITEM	COMMENTS	
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 (Oki Device Setup)

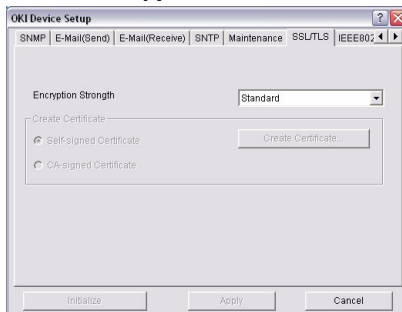
ITEM	COMMENTS
Use SNTP	Enable/disable SNTP (Simple Network Time Protocol).
NTP Server 1 Address	Set the IP address or host name for NTP Server 1.
NTP Server 2 Address	Set the IP address or host name for NTP Server 2.
Adjust Interval	Set the interval for sending time update requests to the server. Select 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 (Oki 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 printer'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.
Service...	<p>The following features can be selected by clicking their check box.</p> <ul style="list-style-type: none"> TCP/IP Protocol NetBEUI Protocol NetWare Protocol EtherTalk Protocol FTP Service Use Telnet Service Use Web Service Use SNMP Service Use POP3 Protocol Use SNTP Use encrypted communication for configuration data 	

SSL/TLS Tab (Oki Device Setup)



ITEM	COMMENTS	
Encryption Strength	Set the strength of encryption: Strong = highest security, slowest speed Standard = medium security, medium speed Weak = least security, fastest speed	
Self-signed Certificate	For IPP encryption within an organisation's internal network (intranet).	
Create Certificate...	When Self-signed Certificate is selected, the following items are configured:	
	Common Name	The printer's IP Address appears here.
	Organisation	Enter the name of your organization.
	Organisation 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 organisation is located.
	Country/Region	Enter the country or region where the organisation 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.	

ITEM	COMMENTS	
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 printer's IP Address appears here.
	Organisation	Enter the name of your organisation.
	Organisation 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 organisation is located.
	Country/Region	Enter the country or region where the organisation 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 (Oki 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/TLS Certificate	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.

NOTE

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 network summary details (see [page 10](#)).

> **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.

- (a) Enter the **Ethernet Address** (MAC Address) and the **IP Address**, then click **OK**.
-

NOTE

The Ethernet (MAC) Address is displayed under "General Information" on the network summary printout (see [page 10](#)).

- (b) AdminManager asks whether you want to initialise the network interface card or not. Select **Yes**.
-

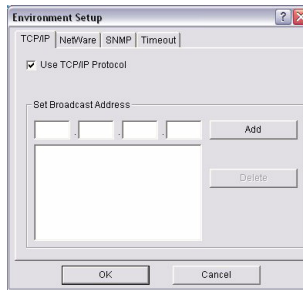
NOTE

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

OPTION MENU

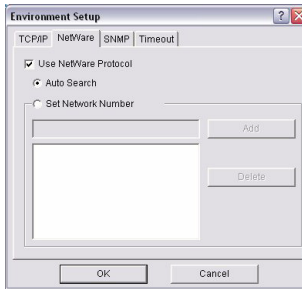
- > **Use TCP/IP Protocol**
If this item is selected, AdminManager uses TCP/IP protocol to search/configure network interface cards.
- > **Use IPX/SPX Protocol**
If this item is selected, AdminManager uses IPX/SPX protocol to search/configure network interface cards.
- > **Environment Setup**
Set environment 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 Oki 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)



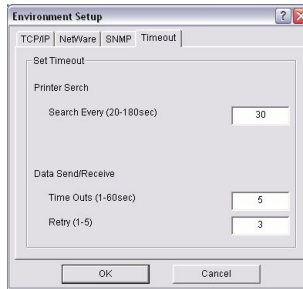
ITEM	COMMENTS
Use NetWare Protocol	Enable/disable NetWare protocol. The default is enabled. If disabled, the search will not be carried out using NetWare.
Auto Search	If Auto Search is selected (the default), AdminManager will search all networks that it can detect.
Set Network Number	Set network addresses that are used to search Oki network interface cards via NetWare protocol. If there are many NetWare file servers on your network, 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 a network number in the list box, then click Delete to remove it.

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

HELP MENU

About

Provides software Version and copyright information.

USING TELNET

CAUTION!

Please ensure that a valid IP address for your network environment is used. Use of an incorrect IP address can cause serious problems on your network.

EXAMPLE TELNET CONFIGURATION

TELNET requires the print server to have a valid IP address configured. If the NIC already has an IP address configured, skip steps 1 to 3 below.

NOTE

The method of configuring commands may differ between workstations. Refer to the workstation's manual.

1. Use the PING command to confirm the connection with the network card.

Example

For IP address 172.168.20.127:

```
ping 172.168.20.127
```

If there is no reply, there is a problem with the configuration of the IP address (the IP address has been already set manually or by the DHCP/RARP server), or with the network. Reset the network interface card settings to the default and try to set a temporary IP address. If you still have the problem after resetting the network interface card, consult the network manager.

2. Login to the network card using TELNET.

Example

For IP address 172.168.20.127

```
telnet 172.168.20.127
```

You should see a sequence similar to the following example:

```
Trying 172.168.20.127
Connected to 172.168.20.127
Escape character is '^]'.
EthernetBoard OkILAN PRINTER".
login: root
'root' user needs password to login.
password:
User 'root' logged in.
No. MENU (level.1)
-----
  1:Status / Information
  2:Printer Config
  3:Network Config
  4:Security Config
  5:Maintenance
 99:Exit setup
Please select (1-99)?
```

3. Enter the number of the item to be changed.
The details window for that item displays.
4. When the configuration is complete, click **Exit Setup** to save your change. To exit without saving your modification, select **Quit**.
5. Turn the printer off and on again.

NOTE

The network card continues to use pre-transmission settings until the printer is turned off and back on again.

SECTION 2: UTILITIES

This section covers the following:

- > ["Oki LPR printing utility" on page 48](#)

OKI LPR PRINTING UTILITY

The Oki LPR Utility is a utility that allows sending data to printers connected to the network via TCP/IP. Can be used as an alternative to using Microsoft Standard TCP/IP.

The utility redirects printing data to the lpr port of the specified IP address.

SYSTEM REQUIREMENTS

Operating System with TCP/IP protocol installed and Oki printers that support TCP/IP.

INSTALLING OKI LPR

Installation consists of two steps:

- > Step 1: Install the Utility
- > Step 2: Add the Printer to the Utility

STEP1: INSTALL THE UTILITY

NOTE

- > *Installation on operating systems may require 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. Insert the drivers CD into the CD-ROM drive and wait for it to autorun.

If the installer does not start automatically, click **Start > Run** and enter **E:\Setup** (where E is your CD-ROM drive) in the Open field, then click **OK**.

2. Accept the Software License Agreement if you have not previously accepted it and select **Network Software**.
3. Click **Install LPR** to begin installation.
4. Verify the *Destination Folder* and *Spool Folder*, and click **Next**.

5. 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 **Oki LPR UTILITY** window, click the icon.
6. Click **Next**.
7. Verify the program folder name and click **Next**.

The installation starts.
8. When the installation ends, the **Setup complete** window displays.

NEXT

*If you wish to view the readme file, click **Yes, I want to view the ReadMe File** before proceeding.*

9. Check **Yes, I want to launch Oki LPR Utility now**.
10. Click **Finish**.

The utility starts.

STEP 2: ADD THE PRINTER TO THE UTILITY

CAUTION!

Please ensure that a valid IP address for you network environment is used. Use of an incorrect IP address can cause serious problems on your network.

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.
 - > If you don't know the IP address, click **Discover** and wait while the program searches the network for the printer. When the **Discovery** window opens, click the printer in the box, then click **OK**.

3. Click **OK**.

The printer is added to the main window.

USING OKI LPR

Refer to the on-line Help for information on how to use the utility.

SECTION 3: PRINTING FROM WINDOWS

This section 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.

NOTE

*Not all utilities are supported by every operating system.
Please check with your User's Guide and your support website
for latest information.*

INSTALLING A NETWORK PRINTER

There are two ways to set up a network printer:

1. Using the Oki Driver Installer program
2. Install it yourself using Add Printer Wizard (Windows)

USING THE OKI DRIVER INSTALLER

The Oki driver installer program searches for compatible printers on the network and installs and configures the printer drivers with the correct port settings automatically.

Using the Oki driver installer program, you can install to the following connected printer types:

1. Locally connected printers
 - > USB port
 - > Parallel port
2. Networked printers
 - > Directly connected (i.e. Peer-to-peer) printers via TCP/IP

The Microsoft Standard TCP/IP is installed and configured to use Port 9100 with the printer's IP address.

- > Printers not directly connected, but shared via a PC (i.e. Client-Server)

Choose between Windows shares or Netware will only be shown if netware printer detected).

WHY USE THE OKI DRIVER INSTALLER?

- > Discovers printers on the network (TCP/IP)
- > Installs driver and correctly assigns appropriate port/IP address
- > Allows easy configuration of sharing the printer with other network users
- > Automatically configures the printer drivers with the appropriate hardware device options such as hard disk drive (via Oki Network Extension software)

USING THE ADD PRINTER WIZARD

METHOD SUMMARY

The following table shows the different ways to connect to the printer (i.e. port types).

	WINDOWS 2000	WINDOWS XP	WINDOWS VISTA	WINDOWS 7
Windows Rally	No	No	Yes	Yes
Windows Standard TCP/IP Port	Yes	Yes	Yes	Yes
OkilPR	Yes	Yes	Yes	Yes
IPP	Yes	Yes	Yes	Yes
NetBEUI	Yes	Yes	No	No

ABOUT THE DIFFERENT METHODS

Windows Rally

Windows Rally is an automated “plug and play” type utility that allows users to discover and configure network devices effortlessly.

Windows standard TCP/IP port

The standard TCP/IP port simplifies connecting to remote printers using the TCP/IP protocol. A computer that acts as a print server must run the TCP/IP protocol in order to print.

You can configure this to use either LPR or Raw (e.g. Port 9100).

OkilPR

Used to connect your printer over TCP/IP using an LPR port.

OkilPR also includes useful tools enabling you to download PS and PRN files directly to your printer, and automatically redirect jobs to other printers on the network.

IPP

The IPP (Internet Printing Protocol), defines a standard protocol for printing as well as managing print jobs, media size, resolution, and such like.

NetBEUI

NetBEUI (NetBios Extended User Interface) is a protocol that was designed for use on small workgroups or LANs. Within Windows, NetBEUI is used for file and printer sharing between computers. It provides a simple method of printing, but the protocol does have limitations and is not as robust as TCP/IP or IPX. Typically it is employed in small business networks or home networks.

SECTION 4: PRINTING USING MACOS

This section covers the following:

- > "Overview" on page 56
- > "Network summary printout" on page 57
- > "MacOS printer setup utility" on page 58
- > "Connecting to your printer" on page 69
- > "Configuring printer hardware options" on page 79

OVERVIEW

This guide is for administrators and it should be read in conjunction with the relevant MacOS manual.

To get the best results from your printer, install the Postscript Printer Description (PPD) file supplied with your printer and use this to customize the Apple PostScript driver that is built-in to the OS X. Features provided by the PPD file includes:

- > Supported paper types
- > Paper trays
- > Printer resolution
- > Printer color matching

NOTE

The PPD file must be installed using the Oki Driver Installer to ensure that all essential files are copied.

SETTING UP A NETWORK PRINTER

1. If the printer does not already have an IP address, use the Printer Setup Utility to assign an IP address. [See "The printer setup utility interface" on page 59.](#)

To do this, you will need to know the printer's MAC address. This can be found on the print server's network summary printout. [See "Network summary printout" on page 57.](#)

2. Install the printer driver software. This copies the printer driver files to the correct location on your Mac OS X system.
3. Make a connection to the printer by USB, TCP/IP, Rendezvous or AppleTalk. [See "Connecting to your printer" on page 69.](#)
4. If required, enable hardware device options such as printer hard disk. [See "Configuring printer hardware options" on page 79.](#)

NETWORK SUMMARY PRINTOUT

The printer server's network summary reports the printer's MAC Address (Ethernet address), required for MacOS configuration.

1. Turn the printer 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 OkiLAN 8200e

MAC Address 01:23:45:14:32:32

HUB Link Setting Auto Negotiation

HUB Link Status OK (100BASE-TX 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 OkiLAN print servers.

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

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

NOTE

If anything other than "OK" is displayed see [page 81](#).

MACOS PRINTER SETUP UTILITY

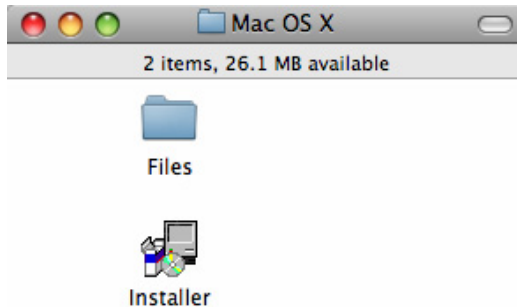
The Printer Setup Utility is a powerful MacOS-based utility for configuring all print server functions using a graphical user interface.

NOTE

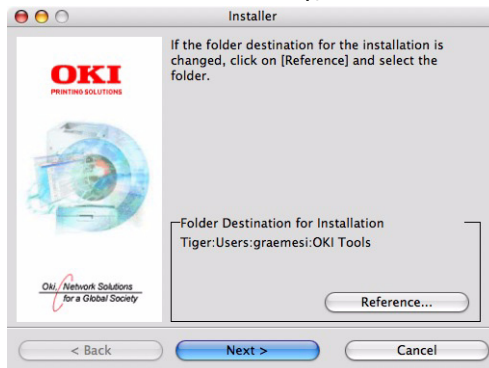
This utility can't work Mac OS X 10.7 or later.

INSTALLING THE PRINTER SETUP UTILITY

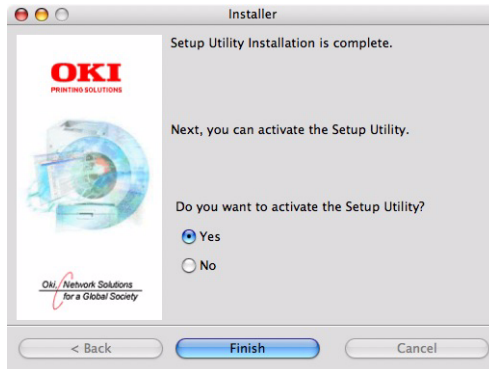
1. Insert the CD into the CD-ROM drive.
2. Open the Printer Setup Utility folder and double-click **Installer**.



3. Select the destination directory, then click **Next**.



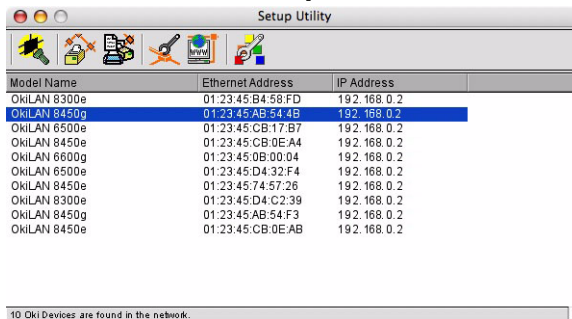
4. Ensure the **Yes** option is selected to activate the utility, then click **Finish**.



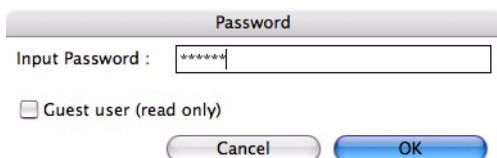
THE PRINTER SETUP UTILITY INTERFACE

The Printer Setup Utility auto-discovers Oki compatible network cards.

1. Select the correct printer to configure and choose **Setup menu > Oki Device Setup**.



2. At the prompt, enter the Admin password.

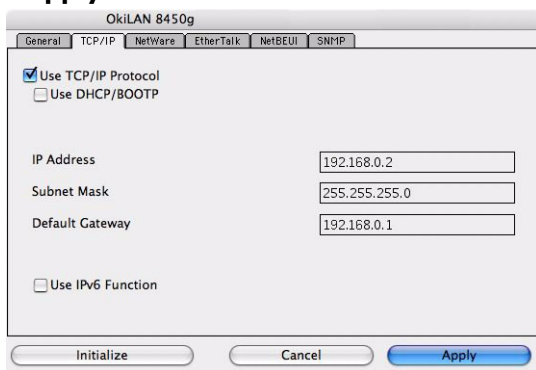


A dialog box titled "Password" with a grey header. Below the header is a text input field labeled "Input Password :" containing seven asterisks. Below the input field is a checkbox labeled "Guest user (read only)". At the bottom are two buttons: "Cancel" and "OK".

NOTE

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 01:23:45:A4:55:79, the password would be A45579.

3. Select the TCP/IP tab and assign your printer's IP address.
4. Click **Apply**.



A configuration window titled "OkilAN 8450g" with a grey header. The "TCP/IP" tab is selected. The window contains several options and input fields:

- Use TCP/IP Protocol
- Use DHCP/BOOTP
- IP Address: 192.168.0.2
- Subnet Mask: 255.255.255.0
- Default Gateway: 192.168.0.1
- Use IPv6 Function

At the bottom are three buttons: "Initialize", "Cancel", and "Apply".

MENU OPTIONS

DISCOVER PRINTERS

Locates and lists all printers in your network which have an Oki compatible network card installed.

PRINTER STATUS MONITOR

Displays the current status of the printer.

PRINTER NIC CARD SUMMARY

Displays the network card summary details.

CHANGE SETTINGS

Use this to configure the network card settings (requires Admin password).

General Tab



The General tab allows you to change the admin password.

1. Click **Change**.

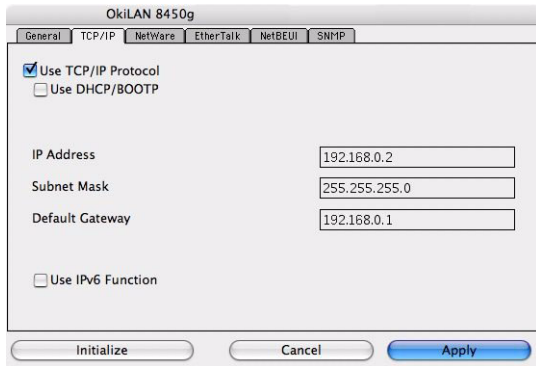
2. Enter the current value, then enter the new value and re-enter it under **Confirm ...**

NOTE

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 01:23:45:A4:55:79, the password would be A45579.

3. Click **OK**.
4. Click **Apply**.

TCP/IP Tab



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.
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.
Use IPv6 Function	Use to enable/disable IPv6.

Netware Tab

ITEM	COMMENTS	
Use NetWare Protocol	Enable/disable NetWare 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	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 Setup	Set the NDS Tree and Context where the Print Server was created.	
Printer Name	Set the NetWare printer object name.	

EtherTalk Tab

The screenshot shows the 'EtherTalk' configuration window for an OkiLAN 8450g printer. The window has a title bar 'OkiLAN 8450g' and several tabs: 'General', 'TCP/IP', 'NetWare', 'EtherTalk', 'NetBEUI', and 'SNMP'. The 'EtherTalk' tab is selected. Inside the window, there is a checked checkbox labeled 'Use EtherTalk Protocol'. Below this, there are two text input fields: 'Printer Name' and 'Zone Name'. The 'Zone Name' field contains an asterisk (*). At the bottom of the window, there are three buttons: 'Initialize', 'Cancel', and 'Apply'.

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

The screenshot shows the 'NetBEUI' tab of the 'OkiLAN 8450g' printer setup utility. The window has a title bar with the printer name and several tabs: 'General', 'TCP/IP', 'NetWare', 'EtherTalk', 'NetBEUI', and 'SNMP'. The 'NetBEUI' tab is active. It contains a checked checkbox for 'Use NetBEUI Protocol'. Below this are three text input fields: 'Short Printer Name' (empty), 'Workgroup' (containing 'PrintServer'), and 'Comment' (containing 'EthernetBoard OkiLAN 8450g'). At the bottom of the window are three buttons: 'Initialize', 'Cancel', and 'Apply'.

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

Ok!LAN 8450g

General TCP/IP NetWare EtherTalk NetBEUI **SNMP**

MIB-II Parameters

SysContact

SysName

SysLocation

Initialize Cancel Apply

ITEM	COMMENTS
SysContact	Set the printer manager name.
SysName	Set the printer model name.
SysLocation	Set the location where the printer is installed.

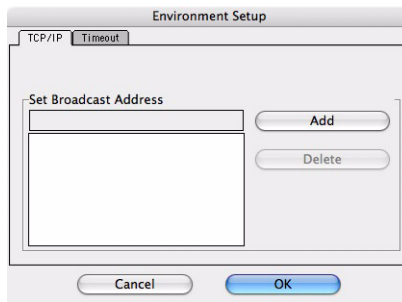
OPEN WEB BROWSER

Displays the printer web page.

CHANGE UTILITY PREFERENCES

Use this to configure the utility preferences for broadcast addresses for TCP/IP protocol and Time Out.

TCP/IP Tab (Environmental Setup)



ITEM	COMMENTS
Set Broadcast Address	Set broadcast addresses that are used to search Oki 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.

Timeout Tab (Environmental Setup)

The screenshot shows the 'Environment Setup' dialog box with the 'Timeout' tab selected. The 'Set Timeout' section includes three input fields: 'Polling Interval (20-180 seconds)' with a value of 30, 'Time Outs (1-60 seconds)' with a value of 5, and 'Retrys (1-5)' with a value of 3. The 'OK' button is highlighted in blue.

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

CONNECTING TO YOUR PRINTER

LION, SNOW LEOPARD AND LEOPARD

BONJOUR, ETHERTALK OR USB

NOTE

EtherTalk connection is not supported in Mac OS X 10.6 or later.

If you have not already done so, run the Oki software installer before following the steps below.

1. Click the Apple menu > **System Preferences**.
 2. Click **Print & Fax** (for Mac OS X 10.7: **Print & Scan**).
-

NOTE

If your printer is already listed, your Mac may already have discovered the printer before you installed the Oki software. In this case, the printer may be using the incorrect PPD file or may not have the correct hardware options configured. You should delete the printer by clicking the - button before continuing.

3. Click the + button (for Mac OS X 10.7: > **Add Other Printer or Scanner**).
4. Click **Default** on the printer browser screen.
5. Select your printer model in the list on the printer browser screen.
6. Click **Add**.
7. Depending on the connection type, you may be prompted to configure any additional printer hardware options. If your printer has options such as a hard disk or second tray, click **Configure** and switch on the relevant options.
8. Quit **Print & Fax** (for Mac OS X 10.7: **Print & Scan**).

TCP/IP CONNECTION

If you have not already done so, run the Oki software installer before following the steps below.

1. Click the Apple menu > **System Preferences**.
2. Click **Print & Fax** (for Mac OS X 10.7: **Print & Scan**).

NOTE

If your printer is already listed, your Mac may already have discovered the printer before you installed the Oki software. In this case, the printer may be using the incorrect PPD file or may not have the correct hardware options configured. You should delete the printer by clicking the - button before continuing.

-
3. Click the **+** button (for Mac OS X 10.7: > **Add Other Printer or Scanner**).
 4. Click **IP** on the printer browser screen.
 5. From the Protocol menu, choose **Line Printer Daemon - LPD**.
 6. Enter the printer's IP address in **Address**.

To find the printer's IP address, you can print a configuration page from the printer's operator panel:

- (a) Press the **Menu** keys until PRINT INFORMATION is displayed.
- (b) Press the **Enter** button.
- (c) Press the **Menu** keys until CONFIGURATION is displayed.
- (d) Press the **Enter** button.
- (e) Confirm that EXECUTE is displayed, then press the **Enter** button.

The Configuration pages are printed. The printer's IP address is shown under the Network section on the left-hand side of the first sheet.

7. Check the correct PPD file for your printer is selected in the Print Using menu.

- 8.** Click **Add**.
- 9.** You will be prompted to configure any additional printer hardware options. If your printer has options such as a hard disk or second tray, click **Configure** and switch on the relevant options.
- 10.** Quit **Print & Fax** (for Mac OS X 10.7: **Print & Scan**).

TIGER

BONJOUR, APPLE TALK OR USB

If you have not already done so, run the Oki software installer before following the steps below.

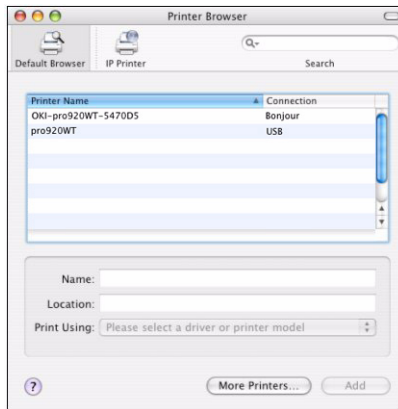
1. Launch Printer Setup Utility

This is located in the **Applications > Utilities** folder.

NOTE

If your printer is already listed, your Mac may already have discovered the printer before you installed the Oki software. In this case, the printer may be using the incorrect PPD file or may not have the correct hardware options configured. You should delete the printer, quit Printer Setup Utility, and relaunch the utility before continuing.

2. Click **Add...**
3. Select your printer model from the Default Browser.



4. Click **Add**.
5. Depending on the connection type, you may be prompted to configure any additional printer hardware options. If your printer has options such as a hard disk or second tray, switch on the relevant options.
6. Quit Printer Setup Utility.

TCP/IP CONNECTION

If you have not already done so, run the Oki software installer before following the steps below.

1. Launch Printer Setup Utility

This is located in the **Applications > Utilities** folder.

NOTE

If your printer is already listed, your Mac may already have discovered the printer before you installed the Oki software. In this case, the printer may be using the incorrect PPD file or may not have the correct hardware options configured. You should delete the printer, quit Printer Setup Utility, and relaunch the utility before continuing.

2. Click **Add...**
3. Click the **IP Printer** button.
4. From the Protocol menu, choose **Line Printer Daemon – LPD**.
5. Enter the printer's IP address in **Address**.



To find the printer's IP address, you can print a configuration page from the printer's operator panel:

- (a) Press the **Menu** keys until PRINT INFORMATION is displayed.
- (b) Press the **Enter** button.
- (c) Press the **Menu** keys until CONFIGURATION is displayed.
- (d) Press the **Enter** button.
- (e) Confirm that EXECUTE is displayed, then press the **Enter** button.

The Configuration pages are printed. The printer's IP address is shown under the Network section on the left-hand side of the first sheet.

6. Check the correct PPD file for your printer is selected in the Print Using menu.
7. Click **Add....**
8. You will be prompted to configure any additional printer hardware options. If your printer has options such as a hard disk or second tray, switch on the relevant options.
9. Click **Continue.**
10. Quit Printer Setup Utility.

PANTHER

RENDEZVOUS

If you have not already done so, run the Oki software installer before following the steps below.

1. Start the Printer Setup Utility.

This is located in the **Applications > Utilities** folder.

NOTE

If your printer is already listed, your Mac may already have discovered the printer before you installed the Oki software. In this case, the printer may be using the incorrect PPD file or may not have the correct hardware options configured. You should delete the printer, quit Printer Setup Utility, and re-launch the utility before continuing.

2. Click **Add...**
3. From the pop-up menu, choose **Rendezvous**.
4. Select the printer to connect to.
5. Click **Add**.
6. Click the **Printer Setup Utility** menu, and choose **Quit Printer Setup Utility**.

After adding the printer, you should configure printer hardware options. Refer to ["Configuring printer hardware options" on page 79](#).

IP CONNECTION

If you have not already done so, run the Oki software installer before following the steps below.

1. Start the Printer Setup Utility.

This is located in the **Applications > Utilities** folder.

NOTE

If your printer is already listed, your Mac may already have discovered the printer before you installed the Oki software. In this case, the printer may be using the incorrect PPD file or may not have the correct hardware options configured. You should delete the printer, quit Printer Setup Utility, and re-launch the utility before continuing.

2. Click **Add...**
3. Click the pop-up menu and choose **IP Printing**.
4. Click the Printer Type menu and choose **LPD/LPR**.
5. Enter the printer's IP address.

To find the printer's IP address, you can print a configuration page from the printer's operator panel:

- (a) Press the **Menu** keys until PRINT INFORMATION is displayed.
- (b) Press the **Enter** button.
- (c) Press the **Menu** keys until CONFIGURATION is displayed.
- (d) Press the **Enter** button.
- (e) Confirm that EXECUTE is displayed, then press the **Enter** button.

The Configuration pages are printed. The printer's IP address is shown under the Network section on the left-hand side of the first sheet.

6. Enter the queue name. If you do not know the queue name, leave it as **Use Default Queue on Server**.
7. Click the pop-up menu and choose your printer model.
8. Click **Add**.

9. Click the **Printer Setup Utility** menu, and choose **Quit Printer Setup Utility**.

After adding the printer, you should configure printer hardware options. Refer to ["Configuring printer hardware options" on page 79](#).

APPLETALK CONNECTION

If you have not already done so, run the Oki software installer before following the steps below.

1. Start the Printer Setup Utility.

This is located in the **Applications > Utilities** folder.

NOTE

If your printer is already listed, your Mac may already have discovered the printer before you installed the Oki software. In this case, the printer may be using the incorrect PPD file or may not have the correct hardware options configured. You should delete the printer, quit Printer Setup Utility, and relaunch the utility before continuing.

2. Click **Add...**
3. From the pop-up menu, choose **AppleTalk**.
4. Choose a printer to connect to.
5. Click **Add**.
6. Click the **Printer Setup Utility** menu, and choose **Quit Printer Setup Utility**.

USB CONNECTION

If you have not already done so, run the Oki software installer before following the steps below.

1. Start the Printer Setup Utility.

This is located in the **Applications > Utilities** folder.

NOTE

If your printer is already listed, your Mac may already have discovered the printer before you installed the Oki software. In this case, the printer may be using the incorrect PPD file or may not have the correct hardware options configured. You should delete the printer, quit Printer Setup Utility, and re-launch the utility before continuing.

2. Click **Add Printer...**
3. From the pop-up menu, choose **USB**.
4. Choose a printer to connect to.
5. Click **Add**.
6. Click the **Printer Setup Utility** menu, and choose **Quit Printer Setup Utility**.

CONFIGURING PRINTER HARDWARE OPTIONS

NOTE

*Applies to IP and Bonjour (for Mac OS X 10.3: Rendezvous) network connections **only**.*

If you have added additional hardware, for example additional paper trays, to your printer these must be enabled in the printer driver.

- 1.** Start the Printer Setup Utility.
This is located in the **Applications > Utilities** folder.
- 2.** Ensure that your printer model is selected.
- 3.** Click the Printers menu, and choose **Show Info**.
- 4.** From the popup menu, select **Installable Options**.
- 5.** Select any options appropriate to your hardware, and click **Apply Changes**.

SECTION 5: TROUBLESHOOTING

NOTE

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

This section covers the following:

- > ["Network summary printout" on page 81](#)
- > ["TCP/IP" on page 82](#)
- > ["NetBEUI" on page 84](#)
- > ["Mac" on page 85](#)

NETWORK SUMMARY PRINTOUT

NETWORK SUMMARY DOES NOT PRINT

Ensure the printer emulation is set to PS (if available) or Automatic.

AN ERROR IS PRINTED IN THE NETWORK SUMMARY

- > 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.

TCP/IP

PRINTER CANNOT FIND THE NETWORK INTERFACE CARD

- > Turn the printer off for 15 seconds and then on again.
- > Confirm that the network interface is enabled on the printer.
- > Make sure there is a response to the ping command.
- > Make sure the network cable is correctly connected and that the green LED close to the printer's network interface is lit. If not, change the cable and try again.
- > Run the Self-diagnostic test (with printer 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 printer off for 15 seconds and then 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 printer 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 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 printer name printed is the logical directory name.

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 that **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 workgroup 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 and cancel the error.
- > Check whether another user is printing. Print after the other user has finished.

MAC

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 10.3.9 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.

NOTE

- > *Ensure that the custom paper size is correct in the printer driver (e.g. 320 x 900mm).*
 - > *If the custom paper size is wrong (e.g. 328 x 900mm), the OS X PostScript driver will replace this with the default paper size - normally A4.*
-

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.

Cause:

The Oki printer PostScript Printer Description (PPD) file has a dependency on a filter file. This filter file must be installed the following location:

`/usr/libexec/cups/filter/OkfilterA`

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

Solution:

Run the Oki printer software installer contained on the CD-ROMs that were supplied with your printer. This will install the CUPS filter file and allow normal printing.

APPENDIX: THE PRINTER 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)
- > Menus (refer to Appendix B in the User's Guide)
- > Admin Setup: password protected ([see page 95](#))
- > Calibration ([see page 100](#))

SPECIAL MENU

[Boot Menu \(see page 102\)](#)

OVERVIEW

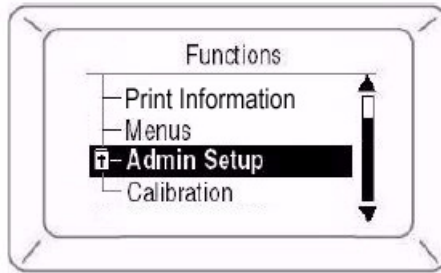
The following tables summarise the Admin Setup, Calibration and BootMenu trees.

The remainder of the menus above are described in Appendix B of the on-line printer 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, for example, the printer hard disk appear only if the associated hardware is installed or under certain conditions, as specified.

FUNCTIONS MENU TREE: ADMIN SETUP, CALIBRATION

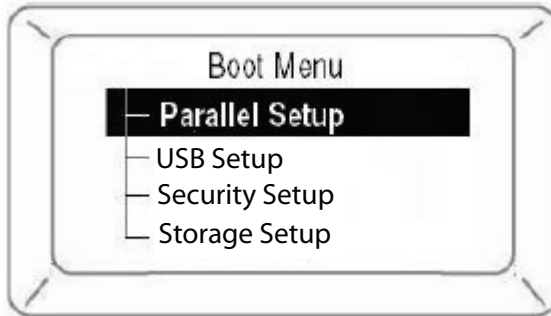


FUNCTION	SUBMENU 1	SUBMENU 2
Admin Setup (password protected)	Enter Password (see page 95)	-
	NetworkSetup (see page 95)	TCP/IP IP Version NetBEUI NetWare EtherTalk Frame Type IP Address Set IP Address Subnet Mask Gateway Address Web Telnet FTP SNMP Network Scale Hub Link Setting Factory Defaults
	Print Setup (see page 96)	Personality Copies Job Offset Output Bin Media Check Transparency Detect Resolution X Dimension Y Dimension
	PS Setup (see page 97)	Network Protocol Parallel Protocol USB Protocol

FUNCTION	SUBMENU 1	SUBMENU 2
Admin Setup (cont.)	Colour Setup (see page 98)	CMY 100% Density
	Memory Setup (see page 98)	Receive Buffer Size Resource Save
	Flash Memory Setup (see page 98)	Initialize Resize PS Area
	HDD Setup (see page 99)	Initialize Resize Partition Format Partition
	System Setup (see page 99)	Near Life LED
	Change Password (see page 99)	New Password Verify Password
	Settings (see page 99)	Reset Settings Save Settings Restore Settings

FUNCTION	SUBMENU 1	SUBMENU 2
Calibration (see page 100)	Auto Density Mode	On Off
	Auto BG Adjust Mode	Off, -1, 0, +1, +2
	Adjust Density	Execute
	Adjust Registration	Execute
	Heavy Media Adjust	Off -5 -4 -3 -2 -1 0 +1 +2 +3 +4 +5
	Print Tuning Pattern	Execute
	Cyan Tuning	Highlight Mid-Tone Dark
	Magenta Tuning	Highlight Mid-Tone Dark
	Yellow Tuning	Highlight Mid-Tone Dark
	Cyan Darkness	0 , +1, +2, +3, -3, -2, -1
	Magenta Darkness	0 , +1, +2, +3, -3, -2, -1
	Yellow Darkness	0 , +1, +2, +3, -3, -2, -1
	White Darkness	0 , +1, +2, +3, -3, -2, -1

BOOT MENU TREE



CATEGORY	ITEM
Parallel Setup (see page 102)	Parallel Bi-Direction ECP Ack Width ACK Busy Timing I-Prime Offline Receive
USB Setup (see page 103)	USB Speed Soft Reset Offline Receive Serial Number
Security Setup (see page 104)	Job Limitation Reset Cipher Key
Storage Setup (see page 104)	Check File System Check All Sectors Enable HDD Erase HDD Enable Initialization
Power Setup (see page 106)	Peak Power Control Power Save Moisture Control

PRINTER MENU: MAKING CHANGES IN THE MENU

MAKING CHANGES IN THE FUNCTION MENU

1. Ensure that the LCD panel indicates that the printer is ready to print.
2. Press the **Enter** button to switch to the Menu mode.
3. Press the **Up-arrow** or **Down-arrow** buttons to scroll down to the Function you wish to change, then press the **Enter** button.
4. Continue to use the **Up-arrow**, **Down-arrow** and **Enter** buttons in a similar manner to drill down to the item you wish to change.
5. Use the **Up-arrow** or **Down-arrow** buttons to scroll down 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 LCD panel indicates that the printer 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 **Up-arrow** or **Down-arrow** buttons repeatedly until **Admin Setup** is highlighted.
5. Press the **Enter** button to select this item.
6. Press the **Up-arrow** or **Down-arrow** 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 **Up-arrow** or **Down-arrow** buttons repeatedly until **FTP** is highlighted.
11. Use the **Up-arrow** or **Down-arrow** 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 printer OFF.
2. Press and hold the **Enter** button while turning the printer back on.

NOTE

*Keep pressing the **Enter** button until INITIALISING appears on the display.*

3. Use the **Up-arrow** or **Down-arrow** 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 **Up-arrow** or **Down-arrow** 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.

PRINTER MENU: FUNCTIONS LIST

ADMIN SETUP

Password

ITEM	VALUE	DESCRIPTION
Enter password	nnnnnn	Enter a password to enter the Administrator menu. The default password is aaaaaa (six 'a').

NETWORK SETUP

ITEM	VALUE	DESCRIPTION
TCP/IP	Enable 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 enabled.
NetBEUI	Enable Disable	Enables/Disables the NETBEUI protocol.
NetWare	Enable Disable	Enables/Disables the NetWare protocol.
EtherTalk	Enable Disable	Enables/Disables the EtherTalk protocol.
Frame Type	Auto 802.2 802.3 Ethernet II SNAP	Sets the frame type (NetWare).
IP Address Set	Auto Manual	Sets IP address setup method (TCP/IP).
IP Address	xxx.xxx.xxx.x xx	Sets the IP address (TCP/IP).
Subnet Mask	xxx.xxx.xxx.x xx	Sets the Subnet Mask (TCP/IP).
Gateway Address	xxx.xxx.xxx.x xx	Sets the Gateway (default router) address (TCP/IP).

ITEM	VALUE	DESCRIPTION
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	Normal: Can work effectively even when connected to a HUB that has a spanning tree feature. However, printer start up time gets longer when computers are connected to two or three small LANs. Small: 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.
Hub Link Setting	Auto Negotiate 1000Base-T Full 100Base-TX Full 100Base-TX 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	Auto 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.
Job offset	ON OFF	Enables/Disables Job offset.

ITEM	VALUE	DESCRIPTION
Output bin	Facedown Faceup	Specifies where to eject prints.
Media check	Enable Disable	Enables/Disables whether the printer checks that paper size required by the print data matches that of the tray. Only standard sizes can be checked.
Transparency detect	Auto Disable	Enables/Disables the automatic detection of transparencies. (Use it while detecting sensor mistakes).
Resolution	600dpi 600x1200dpi 600dpi multi-level	Sets the resolution.
X dimension	76 ~ 210 ~ 328 mm (3.0 ~ 12.9 inch)	Sets default Custom paper width, perpendicular to the direction of motion of paper.
Y dimension	90 ~ 297 ~ 1200 mm (3.5 ~ 47.2 inch)	Sets default Custom paper length, in the same direction as the direction of motion of paper.

PS Setup

ITEM	VALUE	DESCRIPTION
Network protocol	ASCII RAW	Specifies PS transmission protocol for network data.
Parallel protocol	ASCII RAW	Specifies PS transmission protocol for Centronics data.
USB protocol	ASCII RAW	Specifies PS transmission protocol for USB data.

Colour setup

ITEM	VALUE	DESCRIPTION
CMY 100% density	Enable Disable	Enable/disable 100% output against CMY100% TRC compensation. Ordinarily, the TRC compensation function produces appropriate print density, so 100% output is not always enabled. Selecting ENABLE will enable 100% output in individual colour. 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 colour diminution of PS.

Memory setup

ITEM	VALUE	DESCRIPTION
Receive buffer size	Auto 0.5 MB 1 MB 2 MB 4 MB 8 MB 16 MB 32 MB	Sets the size of the receive buffer.
Resource save	Auto OFF 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	Enable 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	nnnnnn	Sets a new password to enter Admin Setup.
Verify password	nnnnnn	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 ENTRY	VALUE	DESCRIPTION
Auto density mode	ON OFF	-	Sets whether density adjustment and TRC compensation is automatically performed. ON: density adjustment is automatically run under the printer specified conditions and reflected in TRC compensation. OFF: the printer does not carry out density adjustment automatically.
Auto BG adjust mode	Off -1 0 +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 .
Adjust density	Execute	-	When Execute is selected, the printer carries out density compensation immediately and reflects it in TRC compensation. Density adjustment must be carried out when the printer is idling.
Adjust registration	Execute	-	When Execute is selected, the printer carries out registration adjustment automatically. Registration adjustment must be carried out when the printer is idling.
Heavy media adjust	Off -5 -4 -3 -2 -1 0 +1 +2 +3 +4 +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.

ITEM	VALUE OR SUBMENU ENTRY	VALUE	DESCRIPTION
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	Highlight	0 +1 +2 +3 -3 -2 -1	Adjusts highlight (light area) of Cyan, Magenta, or Yellow TRC. Plus indicates adjustment towards darker and minus towards lighter.
	Mid-Tone	0 +1 +2 +3 -3 -2 -1	Adjusts mid tone of Cyan, Magenta, or Yellow TRC. Plus indicates adjustment towards darker and minus towards lighter.
	Dark	0 +1 +2 +3 -3 -2 -1	Adjusts dark (dense area) of Cyan, Magenta, or Yellow TRC. Plus indicates adjustment towards darker and minus towards lighter.
Cyan Darkness Magenta Darkness Yellow Darkness White Darkness	0 +1 +2 +3 -3 -2 -1	-	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.

PRINTER MENU: BOOT MENU

To access the Boot Menu:

1. Turn the printer off.
2. Press and hold the **ENTER** key while turning the printer back on.

NOTE

Keep pressing the **Enter** button until *INITIALISING* appears on the display.

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 μ s Medium = 1.0 μ s Wide = 3.0 μ 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 state without changing an interface signal even though an alarm occurs. 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.

USB SETUP

ITEM	VALUE	DESCRIPTION
USB	Enable Disable	Enables/Disables the USB interface.
Speed	480Mbps 12Mbps	Sets the maximum USB 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 state without changing an interface signal even though an alarm occurs. 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.
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.
Reset Cipher Key	Execute	Resets the cipher key used for the encrypted hard disk. The data on the drive before the operation performed with this menu cannot be restored after the operation. Execute displays the following confirmation message: Are Your Sure? - Yes - No By selecting No, the display returns to the previous, menu screen. Selecting Yes reboots the printer automatically, resetting the cipher key. Display condition: - An applicable HDD has been installed in the printer. - The encrypted hard disk function is enabled.

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. HDD: Performs recovery only for an 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.

ITEM	VALUE	DESCRIPTION
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.
Erase HDD	Execute	<p>Appears only when an HDD has been installed in the printer.</p> <p>This function erases all data from the disk so that 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> <ul style="list-style-type: none"> - Yes - No <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: Do You Cancel?</p> <ul style="list-style-type: none"> - Yes - No <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	The fuser of the printer has two lamps. When the lamps turn 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.

OKI EUROPE LIMITED

Blays House

Wick Road

Egham

Surrey, TW20 0HJ

United Kingdom

Tel: +44 (0) 208 219 2190

Fax: +44 (0) 208 219 2199

WWW.OKIPRINTINGSOLUTIONS.COM

