

KIP 7.0



KIP 7.0 Windows[®] Driver

Version A1



Introduction

The KIP Windows driver (also called KUWPD) allows Users to print from Windows Operating System based applications. By design, the driver supports faster spooling and advanced printing features including standard and reverse print collation, supports Unified accounting for job tracking purposes and applying Stamps on printed documents. Standard (ANSI, ARCH, ISO) paper sizes and Media type selection is available within the driver. The driver has been tested by Windows Hardware Quality Labs (WHQL) and proven to deliver superior performance when printing from Microsoft Windows operating systems.

The KIP Windows[®] driver has been WHQL certified for 64 and 32 Bit versions of Windows Vista, XP, 2003 Server and 2008 Server and it meets and exceeds explicit standards of reliability and quality defined by Microsoft.



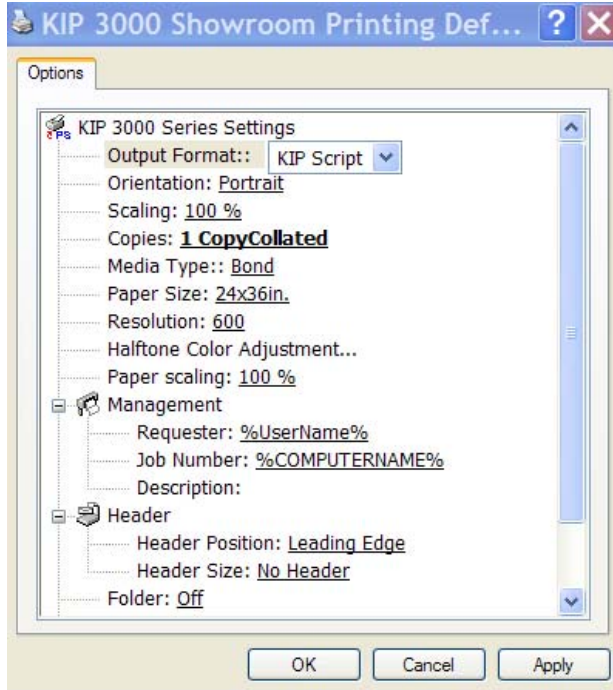


Index

Option Screen – Overview	1
Function Details.....	2
Output Format.....	2
Orientation	3
Scaling	4
Copies.....	4
Media Type	4
Paper Size	5
Resolution	5
Halftone Color Adjustment.....	6
Management	6
Header.....	7
Folder	7
Mirrored Output.....	7
Reverse Collate	7
Stamps	7
Installation.....	8
Prerequisites	8
Installation of the Microsoft Certified KIP Windows Driver	9
Installing and Using KUWPD	10
Setup KIP Windows Driver in LPR Mode	12
Setup KIP Windows Driver in TCP/IP Mode	14
Appendix	16
File Structure Overview	16
Printing Hints.....	18



Option Screen – Overview



Beginning at the top of the layout above, these are the main features on the KUWPD

Name	Feature / Function
Output Format	Selects the type of "Print language" for driver output (explained on next page)
Orientation	Rotation of the page
Scaling	Allows scaling of an image to the page size if not supported in the application.
Copies	Selects the total number of prints
Media Type	Selects the output media type
Paper Size	Selects the page size from standard sizes or create a custom page size.
Resolution	Select the resolution to match the printer DPI
Halftone Color Adjustment	Allows dither pattern change from various colors from within an application to the printed document.
Management	Allows accounting to be used from windows applications.
Header	Places a text header on the print for quick document identification
Folder	Allows the document to be folded (with optional folder)
Mirrored Output	Mirrors the image on the print
Reverse Collate	In a multi page document, reverse the print order

This information is solely for use of KIP Personnel and KIP Authorized Dealers. No part of this publication may be copied, reproduced or distributed in any form without express written permission from KIP. © 2009 KIP.



Function Details

Output Format

Based on requirement, the KUWPD allows users to select their preferred method of creating hard copy output using 2 different output formats, also known as dual output printer language selection. Using 'Printing Preferences' in the driver, users can choose to select 'KIPScript' or 'KIPGL'.

KIP Script Output Format

Users can choose KIPScript (emulates Postscript output) when printing from applications that function best when outputting Postscript data. For example: Adobe Acrobat functions best when using Postscript output. Other graphics applications including Adobe Photoshop, Microsoft Powerpoint and Excel work well with KIPScript output.

KIP GL Output Format

Users can choose KIPGL (emulates HP-RTL) when printing from CAD applications that may not have a pre-built compatible driver. The KIPGL output can be further enhanced by making changes to the pen table on the KIP IPS. Features like line width compensation and RTL dither allow users to achieve exceptional quality when using the KIPGL output format.

NOTE

The KIP PDF option is required for printing KIPScript data. Please contact your local KIP dealer for details.



NOTE

When using the KIPGL output format, the default.PEN - Pen Table at the KIP Controller will also control some of the printing features. Features such as Vector Line Dither Pattern, RTL Raster Dither, RTL Density, and Line Width Compensation are used during conversion for printing. These settings must be configured PRIOR to opening the KIP Unattend print queue.

NOTE

Certain applications work better depending on the *Output Format*.

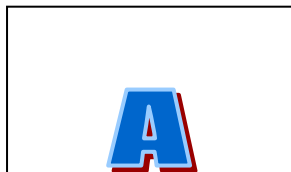
- Applications using heavy raster or photographic data work best with KIPScript type output. Examples: Adobe Acrobat products, Adobe Illustrator Products, Adobe Photoshop Products and Corel Draw based products.
- Microsoft applications generally work well with either output format. Examples: Microsoft Word, Excel, Project.

Orientation

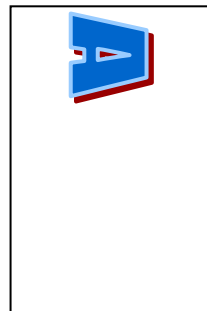
There are three types of orientation in the KIP driver: Landscape, Reverse Landscape and Portrait.

Examples:

Landscape



Portrait



Reverse Landscape





Selection of the orientation should take into account the design or layout from within the application. If an incorrect orientation is selected the page size can be “rotated” incorrectly and image may be lost in the final printed output.

Scaling

Many Windows applications have their own scaling capabilities built into the "print menu". For example: Spicer Imagenation and MS PowerPoint allow for some form of “Scale to Page” type feature. Some Windows applications such as MS Word and MS Excel do not allow for scaling to engineering and architectural wide format paper sizes. The “Scaling” feature in KUWPD allows the user to set a percentage to enlarge the document to fit the paper size desired when scaling is not included in the application.

Example:

No scale used



scale applied to enlarge image

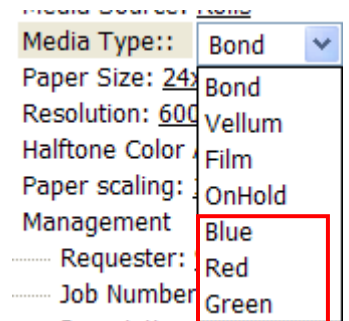


Copies

Select the total number of copies you wish to print. The range is from 1 to 999.

Media Type

The KIP printer may have more than one media type installed. These types may include bond, vellum and film. This feature allows printing onto a media type of your choice if the media has been installed. Custom Media will also be read and available if installed in the printer.



This information is solely for use of KIP Personnel and KIP Authorized Dealers. No part of this publication may be copied, reproduced or distributed in any form without express written permission from KIP. © 2009 KIP.



Paper Size

Select the output page size. Please note that the KIP printer may have a roll installed that may be larger than the selection.

This feature is very important in wide format printing from CAD applications and MS Excel. This is a feature that is required in CAD applications where the image size may vary from one image to the next such as: 36" x 60" for the first document then 24" x 80" for the next.

The Custom Size feature allows the users much simpler access for several capabilities:

- Choose any paper size "on-the-fly" without adding new paper sizes to the operating system (Printers and Faxes→Server Properties→Forms).
- Choose different and non-standard paper sizes for each and every document.
- Choose very long paper sizes.

It is not necessary to exactly match the document length to the output length; the users can intentionally choose a longer length for the media size. For example, if the image is meant to fit on 36" wide media, but the user isn't sure about the length of the media required, the user can set a very long length (up to 200 feet) and the "white" space (extra paper) at the end of the document will automatically be removed. This prevents any waste of media without an image (using KIPGL format)

Resolution

Output resolution is automatically determined when installing the Windows driver.

NOTE

- The KIP 3000 is a 600 x 600 DPI device.
- The KIP 3100 is a 600 x 600 DPI device.
- The KIP 5000 is a 600 x 600 DPI device.
- The KIP 7000 is a 600 x 600 DPI device.
- The KIP 9000 is a 600 x 600 DPI device.



Halftone Color Adjustment

The KIP IPS is a monochrome image processing device and cannot set any other color adjustments.

Management

The KIP IPS has the ability to account for each print produced. This allows for job/department costing. Three fields exist in the driver to allow the user to include this information.

These fields are:

Requester

Job Number

Description

Unified Accounting – The Windows Driver fully supports Unified accounting. For information on how to set up Unified accounting please see the KIP Request or KIP PrintNet sections.

KIP Print Identification

Please input the following information:

* Requester: Find

Job Number: Find

Description: Find

* Required Information OK Cancel

The Requester, Job Number and Description fields under “Printing Preferences” can be set to use operating system environment variables.

Examples: The Requester field can be set to %Username%

 The Description field can be set to %Computename%



Header

A text header can be placed on the top and bottom of the print. The text header includes all the "Unified accounting" information as well as the file name.

Text here

Folder

When selecting the 'Fold' option (assuming the KIPFold device is attached and operational with the KIP Printer), this feature allows the printer to use preset folding parameters from the KIP-IPS based on image width and length. The preset values for folding are set by a certified service technician in the KIP IPS.

Mirrored Output

User can select this feature to produce a mirrored output from the printer.

Reverse Collate

If the document to be printed contains more than one page, collation may be important. To allow the pages to be reversed printed (last page first), user can select this function. Please note that the application must also support multiple page printing.

Stamps

The KIP Windows driver will read the list of available stamps that are pre-configured on the KIP IPS. It is not possible to modify these stamps using the driver. For information on configuring stamps or placing them on the KIP IPS, please see the KIP Request documentation.



Installation

Prerequisites

Requirements at the Network Server or User Workstations

The **KIP Unified Windows Printer Driver** (KUWPD) allows printing from Microsoft Windows 2000 / XP / Vista / Windows x64 Operating systems as well as 2003 and 2008 Server based applications. **(Windows 9x and Windows NT is not supported)**

Please ensure that the applications are up-to-date as possible, in terms of version, available service packs and Microsoft hot fixes (this also includes the OS).

When updating the KUWPD from an older installation, users will likely need the assistance of and/or permission from a network administrator to remove the older version of the KIP driver. Any users connected to the previous shared version of the KIP Printer Driver on the Server or Workstation will need to remove the printer object and connect to the new share that will be installed.

The driver can be downloaded from KIP America website (www.KIPAmerica.com). It is included on all KIP software & operation guide CD's. The driver may also be obtained using KIP PrintNET. Please see the PrintNET documentation for more information.

KUWPD contains:

- 1) Printer driver files
- 2) A dedicated printer port monitor (KIP0) for Microsoft operating systems as described in the following pages. Once the driver has been downloaded and uncompressed, the extracted files can be placed directly on the workstation or server on which it will be installed. Users can copy the extracted files to a USB drive or CD in case individualistic installation is needed. **See Appendix A** for details on the files and file structure.

For new installations on a Workstation or Server see: "Installation Process"

For updating from a previous installation of a KIP Printer see: "Upgrade Installation"



Installation of the Microsoft Certified KIP Windows Driver

Note: (please check this first)

To install KUWPD please ensure that any older version of the KIP Windows driver has been completely removed. This includes the KIP0 port monitor and all files associated with it.

Uninstall Previous Windows Driver Version

1. Go **Start→Settings→Printers and Faxes**
2. Remove the installed KIP Printer Object and any other printer objects connected using available KIP port(s)
3. Go to **File→Server Properties→Ports**
4. Remove any KIP Ports in this list
 - a. This includes any KIPx port
5. Go to **File→Server Properties→Drivers** and remove any KIP Printers in this list
6. Go to **Start→Run** and type **Net Stop Spooler**
7. Go to C:\Windows\System32\Spool\Drivers\W32x86
8. Delete anything that starts with a KA, KI or KU
9. Go to the folder named "2" and remove anything KA, KI or KU
 - a. Within W32x86\2\temp please remove any a KA, KI or KU .tmp files
10. Go to the folder named "3" and remove anything KA, KI or KU
 - a. Within W32x86\3\temp please remove any KA, KI or KU .tmp files
11. Go back to C:\Windows\System32 and remove the kaw2kppm.dll and kuwxppm.dll (if present)
12. Go to **Start→Run** and type **Net Start Spooler**
13. To remove System Registry entries:
 - a. Navigate to HKLM\System\CurrentControlSet\Control\Print\Printers
 - b. Remove any KIP Printer object keys
 - c. Navigate to HKLM\System\CurrentControlSet\Control\Print\Monitors
 - d. Remove KIP Monitor or KIP Printer Port Monitor(s)
14. Reboot the Server if any files or registry keys could not be removed from the previous procedure (or an Access Denied error message is seen).



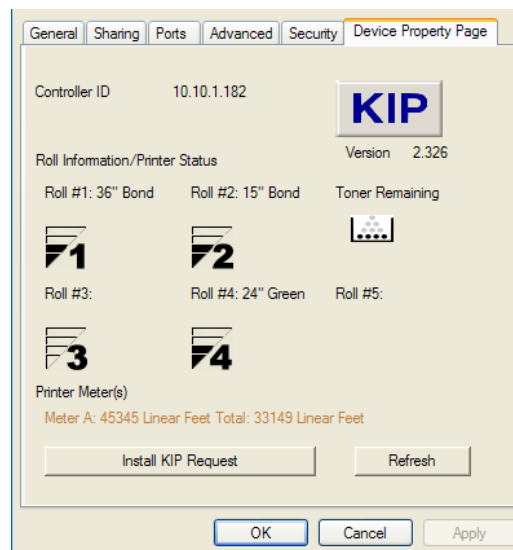
Installing and Using KUWPD

1. Download KUWPD directory to a local PC drive location for ease of use.
2. Go to **Start→Settings→Printer and Faxes**
3. Click on **File→Server Properties→Ports**
4. Click on **Add Port→New Port Type**
5. Browse for *monitor.inf* from the WinXP folder
6. The KIP Monitor will now be a selection within the Port Selection window
7. Select **KIP Monitor** and click on **New Port**
8. Select the desired KIP from the list or type in the IP address of the KIP Printer

9. Ensure the following settings:
 - a. Port name: KIP0
 - b. Installation location: Server/Workstation
 - c. IP Port Number: 8421
10. Click **Start→Settings→Printer and Faxes→Add a Printer** to begin the printer driver installation process
11. Choose a **Local printer attached to the computer** and click on **Next**
12. **Use the following port: KIP0 (KIP Port)**



13. Click on **Have Disk** and browse for *plotter.inf* from the WinXP directory
14. Choose the correct **KIP Printer** model from the list
15. Follow the prompts to complete the installation of the printer driver.
16. Please check the following settings to ensure that the driver has been properly installed:
 - a. Right click on the installed printer driver object and select **Properties**
 - b. Click on the **Device Property Page** tab and verify the version number.



WINDOWS VISTA NOTE: In order for the KIP Windows driver to work properly on Windows Vista, The user will be required to use a local admin account at system logon.

In case VISTA installation is unsuccessful, the 'User Account Control' (UAC) may need to be temporarily turned 'Off' under Control panel – User accounts. Once installation is complete and user is able to print a test page, the UAC can be turned back on again.



Setup KIP Windows Driver in LPR Mode

This section of the document familiarize you with setting up the KIP Windows driver to operate using LPR port, instead of the KIP0 port, about which we learnt in the previous section.

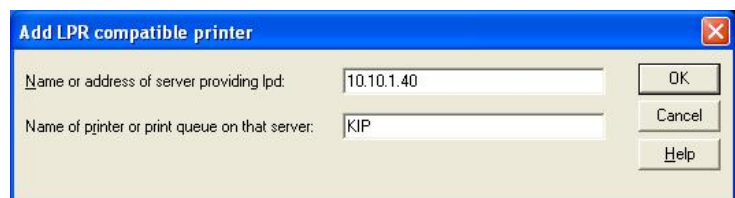
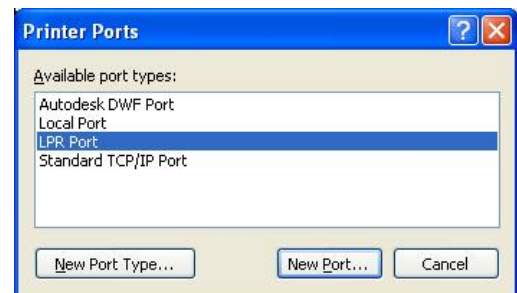
The preferred method of communication is to utilize the KIP0 port monitor. This port monitor has designed taking bi-directional into account. The KIP driver is capable of receiving back information from the KIP IPS which includes information about unified accounting, stamps and printer status.

If the features explained above are not desired, and in case using the KIP0 method of data transfer interferes with IT department's regulations, we will learn how to setup driver communication using LPR port as well as standard TCP/IP port.

The LPR port monitor will provide adequate performance in most scenarios as the Standard TCP/IP port may have port connection limitations.

In order to setup the LPR port monitor it is necessary to have UNIX Print Services installed from the Windows Component setup dialog.

1. Create a new LPR port monitor from the Printer and Faxes dialog.
2. Click on File→Server Properties and select LPR Port and click on New Port
3. Type in the IP address of the KIP IPS and enter the default print queue name on the KIP IPS. This is **KIP**.
4. The LPR port has been setup and configured correctly and may now be attached to a KIP printer object.
5. Click on the Add a Printer Wizard to begin the KIP Windows Driver setup.



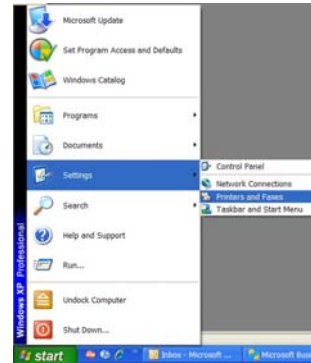


6. Select the newly created LPR port (10.10.1.40:KIP) as the port.
7. Browse for the new printer driver by selecting on the **Have Disk** button. Browse for the latest KIP Printer driver.
8. Choose the proper KIP Printer driver model from the available choices and finish by completing the steps as described in the Add a Printer Wizard setup.
9. Print a test page to ensure that the driver is operating properly.

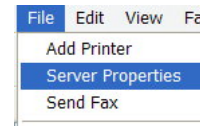


Setup KIP Windows Driver in TCP/IP Mode

1. Go to Start --> Printers and Faxes

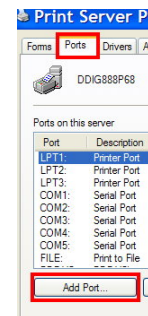


2. Click on File --> Server Properties



3. Click on the Ports tab

4. Click Add Port



5. Highlight Standard TCP/IP Port and the select New Port

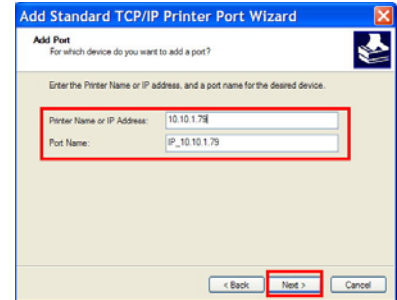
6. Click on Next



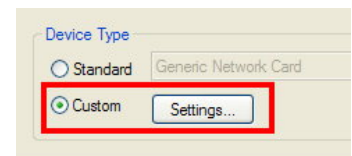
This information is solely for use of KIP Personnel and KIP Authorized Dealers. No part of this publication may be copied, reproduced or distributed in any form without express written permission from KIP. © 2009 KIP.



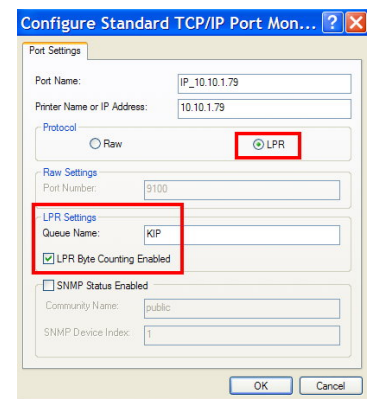
7. Enter the IP address of the KIP Printer (Static IP address preferred)
8. Click Next (may take a minute to determine what it is connecting to)



9. Under Device Type, click on Custom and then Settings
10. Select LPR under Protocol



11. Under LPR Settings type in the default queue name on the KIP controller (This is the printer object name, typically **KIP**)
12. Select Enable LPR Byte Counting
13. Click OK, then Next to review the options and then Finish
14. This completes the port installation.





Appendix

File Structure Overview

When the printer driver is downloaded, extracted and copied to the hard drive of the system, the directory and file structure are as follows:

- \KUWPD**
- \KUWPD\AMD64**
- \KUWPD\Vistax64**
- \KUWPD\Vistax86**
- \KUWPD\WIN2000**
- \KUWPD\WINXPx86**
- \KUWPD\WINXPx64**
- \KUWPD\WIN2003x86**
- \KUWPD\WIN2003x64**
- \KUWPD\WIN2008x86**
- \KUWPD\WIN2008x64**

AMD64

Copy64.exe - utility to properly place x64 files in support path structure

Microsoft.VC80.CRT.manifest – Microsoft compiler manifest file

msvcr80.dll - Microsoft DLL needed.

WIN2000

Kaw2kppm.dll- Printer Port Monitor for Microsoft Windows 2000

Kipgs24.ppd- Postscript Printer Definition File

Kipgs400.ppd- Postscript Printer Definition File

This information is solely for use of KIP Personnel and KIP Authorized Dealers. No part of this publication may be copied, reproduced or distributed in any form without express written permission from KIP. © 2009 KIP.



Kipgs600.ppd-	Postscript Printer Definition File
Kipgs1020.ppd-	Postscript Printer Definition File
Kuwxppd.dll-	Printer Driver DLL for Microsoft Windows 2000 / XP / 2003
Kuwxppui.dll-	Printer Driver User Interface for Microsoft Windows 2000 / XP / 2003
Monitor.inf-	Printer Port Monitor installation file for Microsoft Windows 2000
Plotter.inf-	Printer Driver installation file Microsoft Windows 2000
<u>WINXP</u>	
<u>Amd64</u>	
Kuwxppd.dll-	Printer Driver DLL for 64 bit systems
Kuwxppms.dll-	Printer Port Monitor for 64 bit systems
Kuwxppmu.dll-	Printer Port Monitor User Interface for 64 bit systems
Kuwxppmui.dll-	Printer Driver Interface for 64 bit systems
<u>i386</u>	
Kuwxppm.dll-	Printer Port Monitor for Microsoft Windows 2000 / XP / x64 / 2003
Kipgs24.ppd-	Postscript Printer Definition File
Kipgs400.ppd-	Postscript Printer Definition File
Kipgs600.ppd-	Postscript Printer Definition File
Kipgs1020.ppd-	Postscript Printer Definition File
Kuwxppd.dll-	Printer Driver DLL for Microsoft Windows 2000 / XP / x64/ 2003
Kuwxppui.dll-	Printer Driver User Interface for Microsoft Windows 2000 / XP / x64
Monitor.inf-	Printer Port Monitor installation file for Microsoft Windows XP / x64 / 2003
Plotter.inf-	Printer Driver installation file for Microsoft Windows XP / x64 / 2003



Printing Hints

Issue: Adobe Acrobat 6.X products, when printing with KIPGL output language and large size (E-Size or larger) documents has potential to miss or clip off data prematurely.

Solution: Adobe Acrobat 7.X products correct this issue. Acrobat 6.X requires the use of KIP Script output to solve this issue (choose KIP Script in the drivers **Printing Preferences** prior to opening Acrobat 6)

Issue: Printing from Adobe products such as Acrobat Reader requires Postscript output.

Solution: Default the "Printing Preferences" of the KIP driver to KIP Script prior to opening the Adobe application. Printing of KIPScript data also requires the Powerscript option on the KIP Controller.

Issue: The **output format** for driver MUST be chosen before entering an application to ensure proper output format.

Solution: Ensure **output format** is set in Printing Preferences before launching an application.

Issue: Printing from AutoCAD products with large and/or complex amounts of embedded raster objects will cause a very large output file / spool file size.

Solution: It is suggested to use dedicated KIP ADI/HDI for complex raster printing from AutoCAD products.



U.S.A. ■ Phone: (800) 252-6793 ■ Email: info@kipamerica.com ■ Website: www.kipamerica.com

CANADA ■ Phone: (800) 653-7552 ■ Email: info@kipcanada.com ■ Website: www.kipcanada.com

KIP is a registered trademark of the KIP Group. All other product names mentioned herein are trademarks of their respective companies. All product features, prices and specifications are subject to change without notice. Complete product specifications are available upon request.