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1 Introduction

The KIP certified AutoCAD Driver provides integrated printing from within AutoDesk software applications such as AutoCAD, AutoCAD LT and DWG TrueView. The fully compatible, dedicated KIP HDI driver uses the Autodesk backbone to streamline printing of AutoCAD files. KIP's AutoCAD Driver includes unique data tracking by username and two customizable fields. Two-way printer status allows users to review roll and media information. Large files sizes and long length documents are easily generated by the KIP HDI driver and the HPGL/2 data is transmitted to KIP's System K controller for quick processing and printing.

KIP AutoCAD Driver Key Features

Fully Compatible with Current Versions of AutoCAD | True HDI AutoCAD Driver | 32 and 64 Bit Operating System Compatibility | Real Time Media Status | Custom Media Size Configuration | Media Saving by Auto Rotation | Advanced Color Mode Image Type Selection | Dither Pattern Control for B&W Lines vs B&W Aerial | Integration with KIP Job Accounting and Data Tracking | Integration with KIP Cost Review Application

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Recommended PC Specifications:

- Microsoft® Windows® 7 Enterprise, Ultimate, Professional, or Home Premium (compare Windows 7 versions); Microsoft® Windows Vista® Enterprise, Business, Ultimate, or Home Premium (SP1 or later) (compare Windows Vista versions); or Microsoft® Windows® 10
- For Windows Vista or Windows 7: Intel® Pentium® 4 or AMD Athlon® dual-core processor, 3.0 GHz or higher with SSE2 technology; for Windows XP: Intel Pentium 4 or AMD Athlon dual-core processor, 1.6 GHz or higher with SSE2 technology
- 2 GB RAM
- 1.8 GB free disk space for installation
- 1,280 x 1,024 true color video display adapter 128 MB or greater, Microsoft® Direct3D®-capable workstationclass graphics card
- Microsoft® Internet Explorer® 7.0 or later

The KIP HDI driver is compatible with the following versions of AutoCAD:

2015/2016/2017/2018/2019

- KIP12.hif Is used for 2015 and 2016
- KIP13.hif Is used for 2017
- KIP14.hif Is used for 2018
- KIP15.hif Is used for 2019



2 Installation

The Following section describes the Installation of the KIP System K AutoCAD Driver®. Please follow the Step-by-step procedure for correct installation.

Step	Action	Illustration
1.	Open the AutoCAD Application. Once open, select the red "A" in the top left corner and then mouse over "Print". Select "Manage Plotters"	Autodes Search Commands Output the drawing to a plotter or other device New Open Save Save Save Save as Import Save for manage Publish Definit Save for manage
ζ.	open. Once open select "Right Click" on Add-A-Plotter Wizard and select "Run as Administrator".	NameIPlot StylesPMP FilesAdd-A-Plotter WizardAdd-A-Plotter WizardAdd-Disable Digital Signature IconsAdd-A-Plotter WizardAdd-A-Plotter WizardAdd-A-Plotter WizardAdd-A-Plotter WizardAdd-A-Plotter WizardAdd-A-Plotter WizardAdd-A-Plotter Wizard </td



Step	Action	Illustration
3.	The next window is the Driver introduction page.	Add Plotter - Introduction Page X This wizard provides you with the ability to configure either an existing Windows system plotter, or a new non-Windows system plotter. The configuration information will be saved an a PC3file. The PC3 file will be added as a plotter icon that can be selected from the Autodesk Plotter Manager. You can choose to import configuration information from a PCP or PC2 file, then add that information to the new plotter configuration file you are creating. You can choose to import configuration life you are creating.
4.	Select Next to Continue.	Next >
5.	When the Add Plotter window opens, select "My Computer" and then "Next" to continue.	Add Plotter - Begin X Begin To configure a new plotter, select one of the following: Network Plotter System Pinter System Pinter ® My Computer Plotter Model All settings will be configured by an Autodesk Heidi plotter driver, and managed by this computer. Pots Plotter Name Plotter Name Network Plotter Server All settings will be configured by an Autodesk Heidi plotter driver, and managed by an plotter server. O System Pinter Use a configured Windows system printer driver, and apply different default vindows applications. Verter Windows applications.
6.	The Next screen displays the Plotter Manufacturers and Models. Select the "Have Disk" button to load the KIP AutoCAD driver and add KIP to the Manufacturers list. Note: do not select "Next" this will install the KIP AutoCAD driver incorrectly as Adobe Postscript Level 1 is selected.	Add Plotter - Plotter Model X Begin Network. Flotter System Printer Select your plotter manufacturer and model. If your plotter ian't lated, consult your Inpot Rep or Po2 Proter Model Select Driver Impot Rep or Po2 Ports Plotter Name Optionally, if you have an installation disk containing an HDI driver, choose Have Disk. A Browse for HIF File datage basis id displayed for you to locate and install the Hiff He atached to the HDI driver. Ports Prinsh Manufacturers Modes Plotter Name Prinsh Modes Plotter Name Plotter Name



Step	Action	Illustration
7.	Browse to the location of the KIP AutoCAD Driver install package. Select the folder that contains the correct version of AutoCAD. Note: The Driver can be downloaded from the KIP Website, The KIP Software and Operations Guide disc or from the KIP Printer through KIP PrintPro.Net.	Name AutoCAD_2015 AutoCAD_2015x64 AutoCAD_2016 AutoCAD_2016 AutoCAD_2017 AutoCAD_2017 AutoCAD_2017x64 AutoCAD_2018 AutoCAD_2018 AutoCAD_2018 AutoCAD_2019 AutoCAD_2019 AutoCAD_2019x64
8.	When the folder opens, select the folder that contains the proper language.Note: For this example, English US will be selected.	🔒 en-US
9.	Select the KIP AutoCAD Driver file and select open. In this instance AutoCAD 2018 X64 has been selected so the kip14.hif is the correct driver.	Open ← → ~ ↑ ▲ « AutoCAD_2018x64 → en-US ~ ♂ Search en Organize ~ New folder ▲ KIPK_HDL_SK ▲ AutoCAD_2015 ▲ AutoCAD_2015 ▲ AutoCAD_2015 ▲ AutoCAD_2016 ▲ AutoCAD_2016 ▲ AutoCAD_2017 ▲ AutoCAD_2017 ▲ AutoCAD_2018 ● ▲ AutoCAD_2018x64
10.	KIP has now been added to the Manufacturers list. Select the KIP and then select KIP System K Series. Select the "Next" button.	Add Plotter - Plotter Model X Begin Network Forber System Printer Select your plotter manufacturer and model. If your plotter inth listed, consult your Plotter Model System Printer Optionally, if you have an installation disk containing an HDI driver, choose Have Disk. A Browse for HIF Fle dialop box is deplayed for you to locate and install the HIF file attached to the HDI driver. Potter Name Finish Manufacturers Actocede ePiot (PDF) CalComp Hart Fle formata Stern Fle



Step	Action	Illustration
11.	Nothing needs to be done on this page. Select "Next" to continue.	Add Plotter - Import Pcp or Pc2 X Begin To import plotter specific information from a previously saved Network: Plotter PCP or PC2 Tflc, choose import File. Paper size, plot Potter Model be imported into the new PC3 file. Petter Model be imported into the new PC3 file. Potter Model Import Pcp or Pc2 Potter Model Import File Plotter Name NOTE: Use the Add Plot Style Table witaed to import pen assignment information. Witard to import PCP or PC2 page setup information. witard to import PC2 page setup information.
12.	On the Ports page, choose either the <u>KIP Windows Driver port</u> or if you plan to print direct to the KIP via IP Address, choose <u>LPT1</u> . Later on in the Properties menu, you will choose the IP Address (Step #18) Select "Next" to continue. Note: If you plan to print direct to the IP Address of the KIP is <u>not</u> necessary to have the KIP Windows Driver loaded at this point for the HDI driver to function.	Add Plotter - Ports X Begin Network Plotter System Pinner Plotter Model Select Divier Import Pep or Po2 Ports Ports Ports Person Network Port Ports Ports Person Network Port Ports Ports Network Port Finish Network Port Vip Stop Network Port Finish Network Port Vip Stop Network Port Gordigure Port What is AutoSpool Show all system ports and disable I/0 port validation <
13.	On the Plotter name page, enter a name that will easily be recognized as the KIP AC Driver. Select "Next" to continue.	Add Plotter - Plotter Name X Begin The model name you selected is the default plotter Network Plotter configuration name. You can accept the default name, or enter a name to identify the new PC3 file you have System Printer created. The name you apply will be displayed in the Page Select Driver Select Driver Import Pop or Pc2 Potter Name Potter Name System K.Sened Finish System K.Sened Vector & Data Note: If you enter a name that is exactly the same as a System Printer in name, you will not see the System Printer inted in the AutoCAD 2018 - English Plot or Page Setup dialog boxes. Vector & Next Cancel



Step	Action	Illustration
14. 15.	Nothing needs to be done on this final installation window. Select "Finish" to continue. To link the AutoCAD driver to the KIP so that Accounting may be used, select the red "A" in the top	Add Plotter - Finish Begin The plotter System K Sentes has been installed with its default configuration settings. To modify the default settings, choose Edit Plotter Configuration Plotter Model Select Driver Import Pap or Pc2 Poter Name Edit Plotter Configuration Proter Name Edit Plotter Configuration Proter Name Calibrate Plotter Calibrate Plotter
	left corner and then mouse over "Print". Select "Manage Plotters".	Output the drawing to a plotter or other device New Open Save Save Save Import Import Septent Subject Publish Pint Powing Utilities Close Close Publish
16.	The Plotter Manager window will open. Once open, double-click the newly added KIP System K Series driver.	Name Plot Styles PMP Files Ad-A-Plotter Wizard Adobe PDF.pc3 Adobe PDFapc3 Adobe PDF (Figh Quality Print).pc3 AutoCAD PDF (High Quality Print).pc3 AutoCAD PDF (Figh Quality Print).pc3 AutoCAD PDF (Figh Quality Print).pc3 AutoCAD PDF (Symmetry Porter).pc3 AutoCAD PDF (Symmetry Porter).pc3 DWF6 ePlot.pc3 DWF6 ePlot.pc3 DWF6 rePlot.pc3 DWF6 rePlot.pc3 PublishToWeb PNG.pc3 PublishToWeb PNG.pc3 System K Series.pc3



Step	Action	Illustration
17.	When the Plotter Configuration window opens select the "Device and Document Settings" tab. From the options available select "Custom Properties" entry and then the Custom Properties button.	Plotter Configuration Editor - System K Series.pc3 General Pors Device and Document Settings System K Series.pc3 Media Source and Size Size: Role-Width> <size: (611="" 1189="" a0="" jb="" mm="" x=""></size:> General Source and Size Size: Role-Width> <size: (611="" 1189="" a0="" jb="" mm="" x=""></size:> General Source and Size Size: Role-Width> <size: (611="" 1189="" a0="" jb="" mm="" x=""></size:> General Source and Size Size: Role-Width> <size: (611="" 1189="" a0="" jb="" mm="" x=""></size:> General General Poers General General Poers General General Poers General General Poers General Poers General General Poers General General General Poers General General Poers General General
18.	This will search the Network and load all available KIP System K Printers. Select the desired printer connection (IP Address) and select "OK".	Printer Connection X Select printer or enter IP Address 17270X
19.	This will automatically make the connection to the KIP. Note: Connection is established as indicated by the Printer and Roll information now being displayed.	Cuttorn Properties X Private: Consection Private: OP 470-KTC-44 Media number in printe: Ref 2: 70%, 35 brokes, Board Pot tearname Private: OP 470-KTC-44 Media number in printe: Private: OP 470-KTC-44 Media Cytories Bitime: Modia Cytories Bitime: Modia Cytories Bitime: Modia Cytories Bitime: Modia Cytories Bitime: Bitime: Bitime: Modia Cytories Bitime: Modia Cytories Bitime:



Step	Action	Illustration
20.	Selecting More Options will open a new window. Here there are few more options.	More Options ×
	• Prompt at plot time – Will open a window allowing adjustments to be made prior to plotting.	 Prompt at plot time Disable media warnings
	• Disable media warnings – If selected, the AC driver will not report media errors that may occur during printing.	 Plot direct to printer's IP address Plot to Windows printer port
	• Plot direct to printer's IP Address – When selected will print directly to the KIP Printer via IP Address.	ОК
	• Plot to Windows printer port – When selected will use the KIP Windows Driver Port for printing.	



3 AutoCAD Driver Functionality

The following section will explain the functionality of the KIP AutoCAD (HDI) Driver.

Component	Function
1. Manage Plotters	 Plot Styles PMP Files Add-A-Plotter Wizard Default Windows System Printer.pc3 DWF6 ePlot.pc3 DWFx ePlot (XPS Compatible).pc3 DWG To PDF.pc3 DWG To PDF.pc3 PublishToWeb JPG.pc3 PublishToWeb PNG.pc3 System K Series 7970.pc3
	Open the Manage Plotters window and Double Click the KIP AC driver that has been installed.
2. General Tab	Driver Information Non-System Driver - KIP System K Series c:\program files\autodesk\autocad 2014\drv\kipk11.hdi Version: 11.0.55.0, kipk11.hdi: [0.1], kipk11.drc: [0.1.2] Port: KCS10.10.1.128
	Displays the Driver information, version and Port being used.
3. Ports	General Ports Device and Document Settings Plotter configuration file name: System K Series 7970.pc3 • Plot to the following port: Plot to File • Plot to the following port: Plot to File • Port Description • Plot to the following port: Plot to File • Port Description • Pinter • Pinter • IP_1010.1.138 Local Port • IP_1010.1.144 Local Port • IP_10.10.1.28 • Cosal Port • PDFC • Local Port • PDFC • PDFC • Displays the current port the KIP AC Driver is attached to.



Component	Function
4. Device and Document Settings	General Ports Device and Document Settings Image: System K Series 7970,pc3 Image: Source and Size <src: <width:="" _="" rolb=""> <size: (17="" 22="" ansi="" c="" ir<="" td="" x=""> Image: Size Structure Image: Size Stru</size:></src:>
	button to enter the settings window for the driver.
5. Printer Configuration	Printer Connection Printer: 7970K Media installed in printer: Roll 1: Bond 75% Roll 2: Bond 50% Roll 3: Bond 100% Roll 4: Bond 100%
	Displays the connected KIP Printer and gives a active status of the KIP Printer
	 including: Printer Connection Media installed Media Staus (in 25% increments) Displays printer errors Selecting the Printer button will open a window showing all printers on the network.



Component	Function
6. Plot Identification	Plot Identification Project: Project: Department: Stamp: Used in environments where job costing or department allocations are required for prints on the KIP. They can also be useful for print identification and print distribution as this information can be placed in a header. Fields that can be tracked: Username - This button allows the user to select a predetermined User Name from a drop-down list or manually type a name. This field may be configured to be mandatory and password protected. Project - This button allows the user to select a predetermined Project Number from a drop-down list or manually type the Project Number. This field may be configured to be mandatory and password protected. Department - This button allows the user to select a predetermined Project number. This field may be configured to be mandatory and password protected. Department - This button allows the user to select a predetermined project number. This field may be configured to be mandatory and password protected. Department from a drop down or manually type a department. This field may be configured to be mandatory and password protected.



Component	Function
7. Media Options – Media Type	Media Options Media Type: Bond Folder: Exit Tray: Default Please select Media Type BlueBond Film Vellum
	Control the Media type to be sent with the current job by selecting the desired media. Click the Media Type button to get a list of available medias.
8. Media Options - Alignment	Alignment: Default Select Alignment Select Alignment Please select Alignment Efft Left Right Allows for selection of allignmet of image, Left, Right or Center. Default is Left.
9. Media Options – Remove Borders	Remove borders: None Select Remove borders Please select Remove borders All sides None Trailing edge Allows for the removal of borders on All Sides, Trailing Edge or None.



Component	Function
10. Media Options - Folder	Media Options Media Type: Bond Folder: Exit Tray:
	Folds the print according to the fold patterns configured on the KIP. Please note that the optional folder must be installed for this action to occur.
11. Media Options – Exit Tray	Media Options Please select Exit Tray Media Type: Bond Folder: Default Exit Tray: Default
	 Exit Tray allows for the selection of stacking to Default, Rear or Top. Default - Prints to the top or rear as set up as the default exit tray (no manual selection necessary). Top - Top of the KIP Printer (on available models). Rear - Ejects out the back of the printer.



Component	Function
12. Adjustments – Quality Presets	Adjustments Please select Quality Preset Quality Preset: Copy HPGL Preset: Color Adjustment More Options More Options
13. Adjustments - HPGL Preset	applied to the current job from AC. Adjustments Quality Preset: HPGL Preset: Color Adjustment More Options
	Allows for the selection of HPGL Presets (setup through KIP PrintPro) to be applied to the current job from AC.
14. Adjustments – Color Adjustment	Adjustments Quality Preset: HPGL Preset: Color Adjustment More Options
	Allows the user to select between Simple and Advanced printing modes giving more or less options to choose from.



Component	Function	
15. Adjustments – More Options	Adjustments Image: Color Adjustment Image: Image: Color Adjustment Image: Prompt at plot time Image: Image: Color Adjustment Image: Prompt at plot time Image: I	
16. Pin	Pin printing allows a user to enter a four digit pin into this location prior to printing. When this job arrives at the Print Queue it will be placed into a hold pattern. This job cannot be printed or removed from the Queue without entering the original PIN. Note: This will not hold up the Print Queue as other jobs will move ahead of this job until it is released. This gives greater security to jobs being printed.	



4 Using the KIP AutoCAD Driver

The Following section describes using the KIP AutoCAD Driver® from the AutoCAD Application. Please follow the Stepby-step procedure for correct usage.

For this example AutoCAD 2014 was used.

Step	Action	Illustration
1.	Open the AutoCAD Application	AUTODESK AUTOCAD 2014
2.	Click on the "A" in the top Left corner. When the Drop down window opens select Print.	Print
3.	Select the KIP Printer Driver From the available printers list. Note: If the KIP Windows driver is also installed this will appear first in the list of printers. Be sure to scroll down to the newly installed AutoCAD KIP HDI Driver.	Printer/plotter Name:
4.	To use the available options, select the Properties button.	Properties



Step	Action	Illustration
6.	Select the Custom Properties designation and then the Custom Properties Button.	General Ports Device and Document Settings Image: System K Series 7970.pc3 Media Image: Source and Size <src:< td=""> Roll><width: _=""><size: (24="" 36="" arch="" d="" in<="" td="" x=""> Image: Source and Size <src:< td=""> Roll><width: _=""><size: (24="" 36="" arch="" d="" in<="" td="" x=""> Image: Source and Size <src:< td=""> Roll> Image: Source and Paper Sizes Calibration Image: Source and Paper Sizes Printable Area) Filter Paper Sizes Plotter Calibration Image: Phote Calibration PMP File Name (None> Image: Press the following button to access the device driver-specific user interface. Image: Custom Properties</src:<></src:<></src:<></src:<></src:<></size:></width:></src:<></size:></width:></src:<>
7.	If any changes need to be made they can be made here. Note: Under "More Options" there is a selection for "Prompt At Plot Time". If this setting is selected a variation of this window will automatically open prior to printing. This eliminates the need to go through this step here.	Pirter Connection Pinter 7970K Media installed in pirter: Rol 2: Bool 50%, Rol 2: Bool 50%, Rol 2: Bool 50%, Rol 4: Bool 100%, Pinterification Usemane: Project: Project: Department; Stamp; Stamp; Media Cystoms Folder: Ext. Tray: Default Adjustments: Default Adjustments: Default Mode Options HPGL Preset; HPGL Preset; HPGL Preset; Otor Adjustment More Options PIN: OK Cancel
8.	Select OK when finished	ОК
9.	Select "OK" to send the File to the KIP Printer.	ОК



5 Appendix A

KIP Track Features - Variables

Specialized names or masks can be used for the KIP Track data fields in the Custom Properties of the KIP AutoCAD Driver (User Name, Job Number, and Description)

Both the User Name and Job Number fields by default are recorded into the KIP Track log. The Job Number field can then be the key field used to query Production Reports directly from the KIP Unattend software. The KIP Controller log can also be imported into any program that can read ASCII data.

Specialized Mask Names and Rules

These customized names can be assigned to the mask elements using all normal methods.

Dwgname and dwgpath are the only two variables that can be set.

Example:

AutoCAD reports original file path of drawing named "R300-20.DWG" and the path that the file is stored in as:

C:\Program Files\AutoCAD 2006\drawings\R300-20.DWG

If mask item is set to:

Dwgname logged is "R300-20"

Dwgpath logged is 'C:\Program Files\AutoCAD 2006\drawings\R300-20.DWG"

x replaced by # includes that element of path to be used in accounting data.

dwgpath=x\#\x\x logged is 'Program Files'

dwgpath=x\#\# logged is "Program Files\AutoCAD 2006"



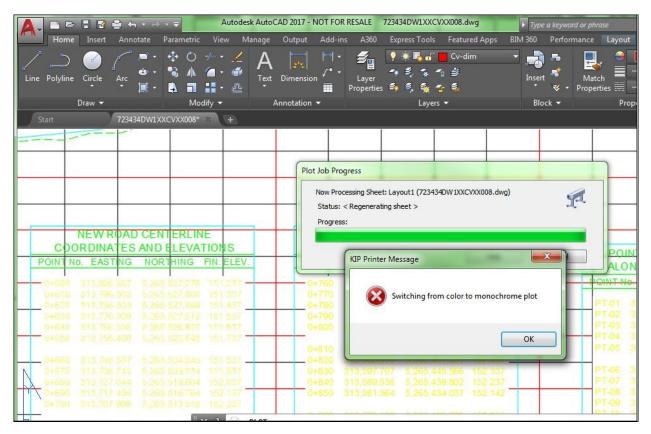
6 Appendix B

Using Role Based Access Control (RBAC) with the KIP AutoCAD Driver

If the RBAC is being used to create specific roles for individual users these roles will apply when printing from AutoCAD as well.

There are two main Roles that can be applied to the AutoCAD (HDI) Driver Color User and B&W User. If a role is created (using the KIP Accounting Center application) and is then assigned to a user's login they will only have these abilities when printing from AutoCAD. The bellow screen shots show what happens if the user does not have the rights to print in either B&W or Color.

Black & White Only User – This user only has the ability to print with B&W output. When a Color File is selected and then the user tries to print in color mode the following message appears:



The output will be switched from Color to B&W.



Color Only User – This user only has the ability to print with Color output. When a Color File is selected and then the user tries to print in B&W mode the following message appears:

The user is notified they are not allowed to print monochrome plots and the job is cancelled. This can then be sent as Color.

/ / = · *	Autodesk AutoCAD 2017 - NOT FOR RESALE 723434DW1XXCVXX00 etric View Manage Output Add-ins A360 Express Tools Featured Apps BIM 360 Performance Layout Aove O Rotate Trim
Line Polyline Circle Arc	.opy
	Plot Job Progress Now Processing Sheet: Layout1 (723434DW 1XXCVXX008.dwg) Status: < Regenerating sheet > Progress:
	Help Cancel
	Monochrome plots are not allowed OK
	NEW ROAD CENTERLINE NEW ROAD CENTERLINE COORDINATES AND ELEVATIONS COORDINATES AND ELEVATIONS POINT No. EASTING NORTHING FIN. ELEV. POINT No. EASTING NORTHING 0+600 313,806.287 5,265,527.276 151,237 0+600 313,796.302 5,265,527.276 151,237 0+700 313,654.909 5,265,485.97

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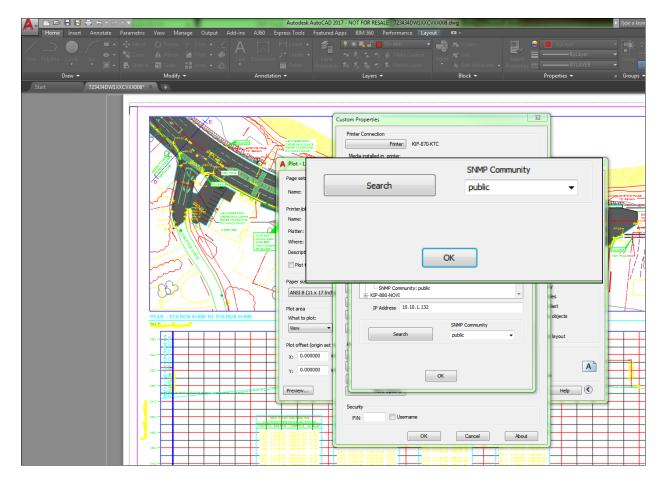


7 Appendix C

Setting the SNMP Community String

The **SNMP** Read-Only **Community String** is like a password. It is sent along with each **SNMP** Get-Request and allows (or denies) access to device. The KIP Printer is shipped with a default password of "public". (This is the so-called "default public **community string**".) Starting with The KIP AutoCAD driver version 1.0.16 the community string can be set to something other than "public".

When installing the driver and setting up the printer connection there is now a box for SNMP Community. The user may enter a new community string here instead of the default "public". Once set, the driver will remember the setting.



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