

kryo·connect™

Getting Started . . .

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Planer plc, 110 Windmill Road, Sunbury, Middlesex, TW16 7HD, UK.

Telephone: +44 (0)1932 755000

Facsimile: +44 (0)1932 755001

Web: www.planer.co.uk

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Getting Started

Symbols used in this guide



Failure to follow these instructions could result in personal injury.



Failure to follow these instructions could result in damage to your equipment or system.

Symbols & legends used on the kryo-connect



Read the manual as failure to follow these instructions could result in personal injury.



Ethernet 10-base T socket



Chassis terminal



DC power inlet socket. Centre positive.

RESET

Reset switch. Press to reset the unit. This will cause any changes that have not been written to the web server's permanent memory to be lost.

RS232/485

RS232 and RS485 connector. Interface depends on the internal DIP switch settings.



Alternating current (AC)



Direct current (DC)



Equipment protected by double or reinforced insulation.

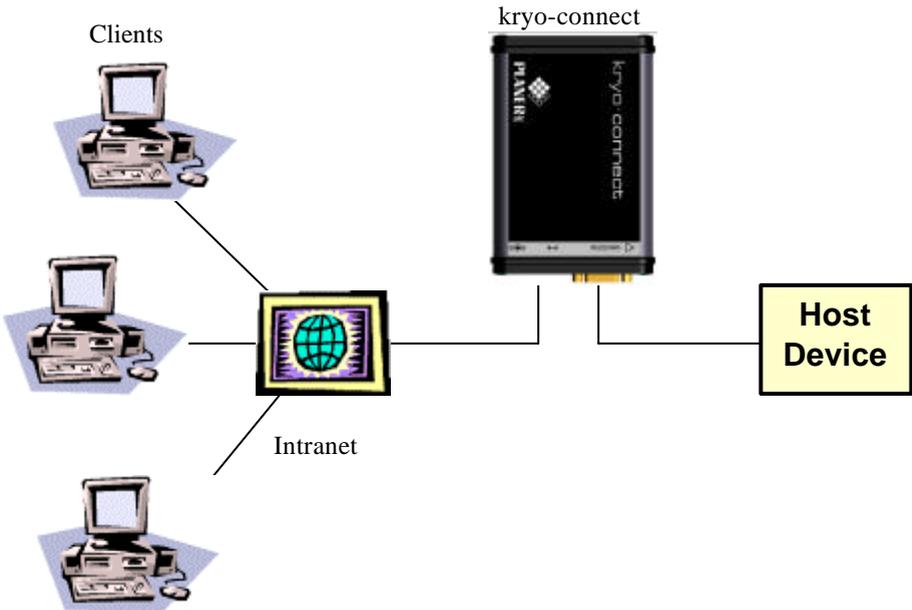
Notices



This product and the information, reports and e-mail messages provided by the unit must not be used in safety critical applications. The *kryo-connect* is intended for information purposes only and must not be the sole means of monitoring alarm and fault conditions.

Introduction

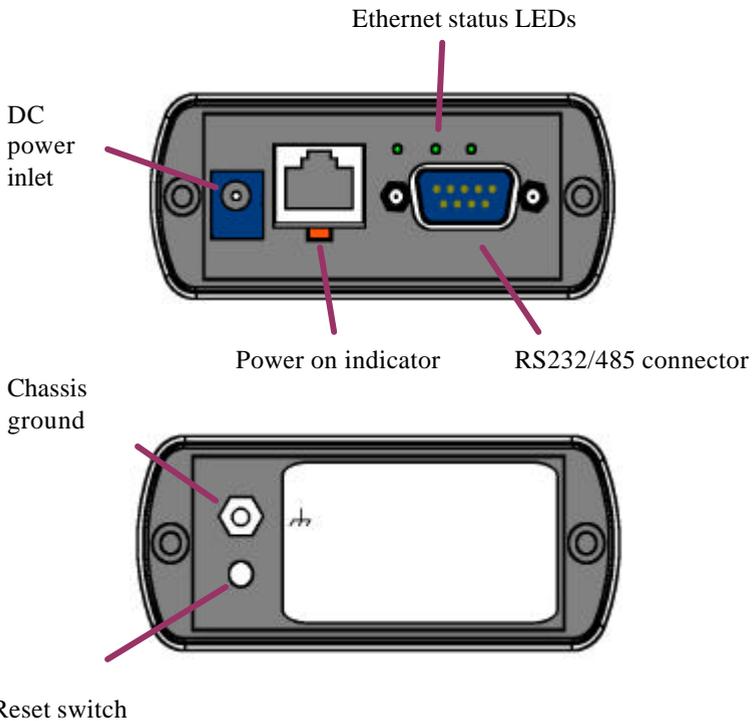
The *kryo-connect* is a small desktop or wall mounted unit designed to convert an existing device with an RS232 or RS485 interface into a web server. This allows the device to be controlled and interrogated using a standard web browser as shown below



Getting Started

The actual operation of the software depends upon the application that has been loaded into the unit. This is identified by the label on the end of the unit. Once the unit is connected to your network and accessible through your web browser, you will be able to access the online manual from the unit's home page. This manual provides details on how to connect the unit to your network so that the online documentation specific to the installed application can be loaded.

Connections and Indicators



Minimum System Requirements

Before trying to install the *kryo-connect* you must ensure that your network and client PCs meet the minimum system requirements.

Network:

- 10 BaseT ethernet. Category 5e cable recommended as minimum.
- Free RJ45 Socket on hub or router located within 100m (330 feet) of the unit.

Client PC:

- Microsoft Internet Explorer v6+ with cookies enabled and Java Virtual Machine (VM) installed.

Administrator's PC

Please note that this PC is only required when first connecting the unit to the network. Once the connection has been made only the standard Client PC is required.

- 32 MB RAM minimum
- Windows 95 SP1, 98 SE, NT4 + SP5, ME, 2000 + SP2, XP Home or Professional.
- CD Drive.
- Microsoft Internet Explorer v6+ with cookies enabled and Java Virtual Machine (VM) installed.

Connecting to the network

The only connection required from the unit to the network is the Ethernet cable.



The unit is designed for connection to information technology equipment compliant with EN60950 or its equivalent. Use with other equipment may compromise the safety of the device. The unit should only be connected to an Ethernet LAN internal to the building.



It is advisable not to permanently install the *kryo-connect* unit until you have completed the network connection and reviewed the online documentation as there may be additional installation requirements that need to be considered.

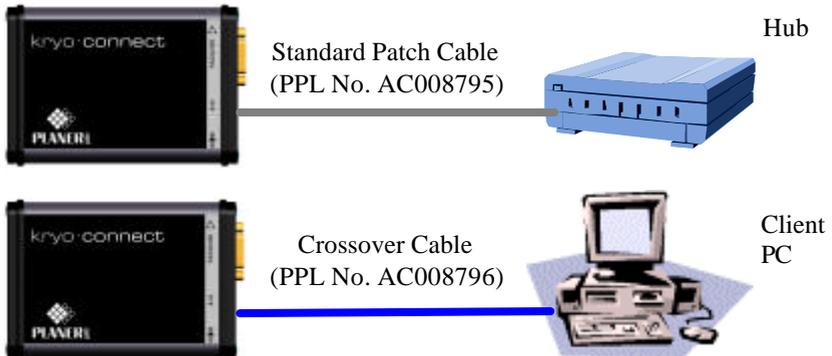
- Locate the RJ45 network connector located in the end panel of the web server.



RJ45 network connector

If you are connecting the unit to a network hub you will need a standard patch cable but if you are connecting directly to a PC with an Ethernet connection you must use a crossover patch cable. These cables are available from Planer plc.

- Connect one end of the appropriate cable to the unit and the other end to the network hub or PC as shown below taking care not to touch the pins of the connectors. NB. The length of the cable should be at least 2.5m and less than 100m.



Should you need to create a longer cable for your installation, the connection details are given in the section *Ethernet Cables*.



Check that the voltage rating of the *kryo-connect* power supply matches your mains power outlets. If not, contact your supplier and do not continue with the installation.

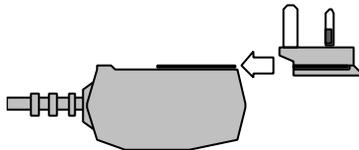


The power supply is only suitable for indoor use and must be positioned away from sources of condensation and moisture.



Any power supply connected to the *kryo-connect* must comply with IEC 950 and all outputs must meet the requirements for non-hazardous accessible parts and limited power circuits.

- If not already fitted, slide the appropriate socket adapter onto the power supply. Ensure that it clips securely in place.



- Plug the power supply into an easily accessible mains power socket located close to the *kryo-connect*. The power supply provided is suitable for connection to an IT power distribution system.
- Plug the power supply's output lead into the DC power inlet of the *kryo-connect*.
- You are now ready to set up the system so that *kryo-connect* can be recognised on the network.

Preparing for Configuration



Configuring the network settings requires knowledge of the current network structure and IP addresses and will require consultation with your network administrator. Incorrect settings could result in the computer network failing to operate correctly.

The *kryo-connect Configurator* program is used to set up the networking properties of the *kryo-connect*. The program is able to communicate at the networking level and to configure the server with sufficient information to present itself on an Internet Protocol (IP) based network.

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kryo-connect Configurator is a Java™ application and is provided on the *kryo-connect* Configuration CD along with the Java Runtime Environment (JRE).

For the best results when using this software, ensure that any *kryo-connect* units are located within the same network segment as the Administrator's PC. Note that this software may not be able to address units if a firewall or router needs to be traversed. In this case, during configuration, you will need to connect the *kryo-connect* directly to the configuration PC using the crossover patch cable. Once configuration is complete you will be able to disconnect the unit from the configuration PC and then reconnect it in its correct location.

Starting *kryo-connect* Configurator software

- Insert the *kryo-connect Configurator* CD into the CD drive on the PC.

On a PC running Windows 32

- You must be logged in with administrator's rights to install the program.
- The CD should start the installation program automatically.
- If the program does not start, click on the **Start** button on the Windows task bar.
- Select *Run* from the menu.
- Click *Browse*, locate the CD drive and then select *the kcConfig_windows_x_y_z.exe* file from the CD. (x_y_z is the current version of the software.)
- From the *Run* dialogue box select *OK* to start the installation program.
- Follow the on-screen instructions.
- Once the installation is complete you will be able to start the *kryo-connect Configurator* program by selecting *Start > Programs > kryo-connect > kryo-connect Configurator* from the Windows task bar.

On a PC running Linux

- Note that although the installer does not require an X Server, the application does.
- Log in as root and mount the CD.
- At the shell type *rpm -ivh <mount point of CD>/kcConfig_linux_x_y_z.rpm*. (x_y_z is the current version of software.)
- Once the installation is complete, type */usr/local/bin/kcConfig* at a shell prompt to launch the application. (requires an X Server to run)

Now follow the steps in the section *Running kryo-connect Configurator*.

Running kryo-connect Configurator

- In the *Device serial number* field enter the serial number of the device you need to configure. The serial number is on the label on the end face of the unit.



Network settings should only be configured by the network administrator familiar with the network to which the *kryo-connect* is being connected. Incorrect settings could result in the computer network failing to operate correctly.

- From the window set the parameters necessary for the unit to communicate with your network. The individual fields are described below along with help on how they should be set.

IP Address :

Each device on your network **must** have a unique IP address. Your network administrator will need to provide you with an appropriate address.

Network Mask :

The network mask allows the unit to determine whether it is a local device. The correct setting for this parameter requires knowledge of the actual network system.

Default Gateway :

When a user accessing the *kryo-connect* is not local, as determined by the IP Address and Network Mask, the device entered here will be used to route traffic to and from the user.

DNS Server :

In this location, enter the IP Address of the Domain Name Server (DNS). This is used by the *kryo-connect* to resolve IP host names. Leave this as 0.0.0.0 or blank if no DNS server is used.

Once the settings have been entered into the dialogue box and reviewed, record them in the *Configuration Details* section of this guide.

- Switch on the *kryo-connect*. The unit will take one minute to start up. After one minute but before two minutes have elapsed, click the *Apply* button to transmit the new configuration to the *kryo-connect*. The program will then launch the login page for the web server application.

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Note that the configuration is only temporary and will be lost if the system is reset.

- If a *connection failed* page appears, check the serial number you used for the configuration. Click *Exit* on the *kryo-connect Configurator* and then repeat the process from the start.
- Select *Exit* from the *kryo-connect Configurator* to close the configuration program.
- Login to the server. If this is a new system, use the user name of **MANAGER1** with a password of *password*. NB. the name and password are both case-sensitive.
- Select the *User guide* button from the main *Welcome* page and follow the instructions for setting up the unit and making the changes permanent.

Starting the web server

- At the client PC, start your web browser.
- In the URL or web address enter the start address for kryo-connect as recorded in the section *Configuration Details*.
- When the *Login* page appears, enter your *user name* and *password*. Note that these are case sensitive.
- From the main *Welcome* page, select the *User guide* button to access the online help specific to the installed application.

Configuration Details

As you follow the instructions in this guide you should also complete the details of your *kryo-connect* in the table below.

Serial number	
IP Address	[] [] [] []
Network Mask	[] [] [] []
Default Gateway	[] [] [] []
DNS Server	[] [] [] []
URL to access the <i>kryo-connect</i>	

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Contact Details

Technical support:

E-mail: support@planer.co.uk

Telephone: +44 (0)1932 755006

Fax: +44 (0)1932 755001

Sales:

E-mail: sales@planer.co.uk

Telephone: +44 (0)1932 755005

Fax: +44 (0)1932 755001

Ethernet Cables

Should you need to create your own ethernet cables, details of the pinouts are shown below. Colours shown are to the EIA/TIA 568A colour scheme. All connectors are shown with the clip downwards.

Standard Patch Cable		
Pin	Colour	
1	White/Green	White/Green
2	Green	Green
3	White/Orange	White/Orange
4	Blue	Blue
5	White/Blue	White/Blue
6	Orange	Orange
7	White/Brown	White/Brown
8	Brown	Brown

Crossover Patch Cable		
Pin	Colour	
1	White/Green	White/Orange
2	Green	Orange
3	White/Orange	White/Green
4	Blue	Blue
5	White/Blue	White/Blue
6	Orange	Green
7	White/Brown	White/Brown
8	Brown	Brown

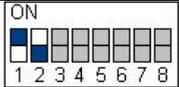
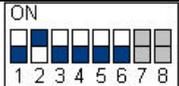
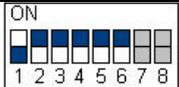
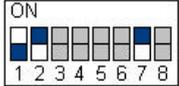
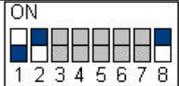
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RS232 / RS485 Connections

The *kryo-connect* is provided with a 9 way D-Type plug that can be configured for both RS232 and RS485 interfaces. The actual configuration is determined by dip-switches inside the unit and is normally factory configured. The information below can be used if the configuration needs to be changed or if interconnecting cables need to be made.



It is important that the *kryo-connect* is connected to ground to prevent charge build up. On RS232 connections this is achieved through the cable screen and signal ground. On RS485 connections, if no ground is provided through the cable, the chassis ground  should be connected to a suitable ground reference.

Port type	DIP switch *	Pin outs								
		1	2	3	4	5	6	7	8	9
RS232 – Wired as DTE. Requires null modem cable to connect to a PC		-	R X	T X	-	G N D	-	R T S	C T S	-
RS485 full duplex		tx -			rx -		tx +		rx +	
RS485 Half duplex		A -					B +			
RS485 terminate RX 120 Ohms		Connects a 120 Ohm resistor across the RX pair								
RS485 terminate TX 120 Ohms		Connects a 120 Ohm resistor across the TX pair								

* grey switches means the setting does not matter or is determined by another requirement such as termination

General Terms

In this document the term *the Software*, refers to the programmes, files and documentation provided as kryo-connect, kryo-connect Configurator and includes software provided pre-installed in the kryo-connect or on any separate media. Other software components supplied with kryo-connect are owned by their respective Companies and their licences and documentation are duly transferred in accordance with their separate licence agreements.

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TERM

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Any questions concerning *the Software* or Licence Agreement should be referred in writing to Planer plc, Windmill Road, Sunbury, Middlesex TW16 7HD, U.K.

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Specifications

kryo•connect

DC power inlet	5 V \pm 0.25V 300 mA
Interfaces	RS232/RS485 - 9 way D Type plug - pinout as DTE for RS232 10 Base T Ethernet - RJ 45 shielded
Internet	SMTP e-mail client FTP server Telnet client/server HTTP v1.0 web server TCP-IP/UDP/ICMP
External Dimensions	115mm x 83mm x 35mm
Weight	0.23kg

Power supply

External dimensions	30mm x 45mm x 85mm excluding mains socket adaptor DC cord length 1.8m
Connector	2.1mm x 5.5mm x 9.5mm coaxial plug, centre positive.
Weight	0.14kg
Input	100-240 V~, 50-60 Hz, 0.25 A
Output	5V, 1.0A, \pm 5%

General

Operating environment	5 °C to 40 °C, 10% to 90%RH non-condensing
Storage environment	-10 °C to 50 °C, 10% to 90%RH non-condensing

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