

Korenix JetPort 5601 / 5601f Serial Device Server

User's Manual

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www.korenix.com

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1

Introduction

Jetport 5601 series is a smart one RS-232/422/485 to Ethernet serial device server. It includes JetPort 5601 and 5601f. JetPort 5601 is one-port RS232/422/485 to Redundant Ethernet Solution. It's the first serial device server with redundant dual Ethernet ports, the ports can auto-recovery in less than 200ms. JetPort 5601f is one-port RS232/422/485 to Fiber Ethernet Solution. 5601f-m supports one Multi-mode fiber port. 5601f-s supports one Single-mode Fiber port.

JetPort serial device server connects the serial port of devices such as card readers, measurement devices, or data acquisition terminals, over Ethernet just like locally attached. It eliminates the limitation of single host and transmission distance of traditional serial communications by creating access for multiple hosts in Ethernet. The compact size and various mounting options further create installation flexibility.

This chapter describes:

- **Serial to Ethernet Technology Overview**
- **Product features**
- **Product specification**
- **Package checklist**

Serial to Ethernet Technology Overview

Korenix JetPort serial device servers provide perfect solution to manage serial devices via Ethernet in flexible ways, such as TCP server, TCP client, UDP, or Windows virtual COM. JetPort creates a transparent gateway for the serial communication to Ethernet. If the control program uses network standard API, you can choose TCP or UDP as the communication protocol. If the control program uses COM port, you can install the Windows driver to add virtual COM ports.

Product Features

JetPort 5601/5601f has the following features:

- Smart one-port RS232/422/485 to Ethernet Solution
- Redundant Dual Ethernet Ports, Auto-Recovery in Less Than 200ms (JetPort 5601)
- One Multi-mode / Single-mode fiber (JetPort 5601f)
- World's highest serial speed: 460.8kbps
- Supports Secured Management by HTTPS and SSH
- JetPort Commander, Windows utility for auto discovery, multiple device setting and monitoring.
- Versatile serial operation options: Virtual Com, Serial tunnel, TCP server, TCP client, UDP
- Max. 5 Virtual COM, TCP server, TCP client connections
- Event warning by Email, SNMP trap, Syslog and Beeper
- Virtual COM driver for Windows NT/2000/XP/2003

Product Specification

Network Interface	
Ethernet	2* 10/100BaseTX, Redundant Ethernet (JetPort 5601) 100BaseFX Multi-mode (JetPort 5601f-m) 100BaseFX Single-mode (JetPort 5601f-s)
Ethernet Connector	RJ45 (JetPort 5601)
Fiber Connector	100BaseFX: Duplex SC (JetPort 5601f)
Fiber Cable	Multi-mode Fiber: 50/125um or 62.5/125um, max. distance 2KM (JetPort 5601f-m) Single-mode Fiber: 8/125um, 9/125um or 10/125um, max. distance 30KM (JetPort 5601f-s)
Fiber Transceiver	JetPort5601f-m, Multi-mode: 2KM max. distance Wave-length: 1310nm Min Tx Power:-19dBm Max Tx Power:-14dBm

	Min Rx Sensitivity:-30dBm Link budget:11dBm JetPort5601f-s, Single-mode: 30KM max. distance Wave-length:1310nm Max Tx Power:-8dBm Min Tx Power:-15dBm Min Rx Sensitivity:-34dBm Link budget:19dBm
Protection	Built-in 1.5 KV magnetic isolation
Protocols	ICMP, IP, TCP, UDP, DHCP, BootP, ARP / RARP, DNS, SNMP MIB II, HTTPS, SSH
Serial Interface	
Interface	RS232, RS422, 2/4-Wire RS485
Connectors	male DB9
Data Rates	110 bps to 460.8 Kbps
Data Bits	5, 6, 7, 8
Parity	odd, even, none
Stop Bits	1, 1.5, 2
RS-232	TxD, RxD, RTS, CTS, DTR, DSR, GND, DCD
RS-422	Tx+,Tx-, Rx+, Rx-,GND
RS-485 (4-wire)	Tx+,Tx-, Rx+, Rx-,GND
RS-485 (2-wire)	Data+, Data-,GND
Flow Control	XON/XOFF, RTS/CTS, DTR/DSR
Serial Line Protection	15KV ESD
Software Utility	
Utility	JetPort Commander for Windows 2000/XP <ul style="list-style-type: none"> ● Device discovery ● Auto IP report ● Device setting (run-time change, no rebooting) ● Access control list ● Group setting ● Device monitoring ● Serial port monitoring ● Log info ● Group Firmware update batch

Serial mode	Virtual Com / TCP Server / TCP Client / UDP / Serial Tunnel <ul style="list-style-type: none"> ● TCP Alive Check Timeout ● Inactivity Timeout ● Delimiter for Data Packing ● Force TX Timeout for Data Packing
Multiple link	5 Hosts simultaneous connection: Virtual Com / TCP server / TCP Client
Virtual Com	Windows 2000/XP/2003
Configuration	Web HTTPS console, Telnet SSH console, JetPort Commander for Windows 2000/XP
Power Requirements	
Power Input	PWR1: 12~48VDC in 2-pin Terminal Block PWR2: 9~30VDC in Power Jack with Power Adapter
Power Line protection	<ul style="list-style-type: none"> ● 1 KV Burst (EFT), EN61000-4-4 ● 0.5 KV Surge, EN61000-4-5
Mechanical	
Dimensions	29.6 mm (H) x 96 mm(W) with ears x 99 mm (D)
Regulatory Approvals	FCC Class A, CE Class A RoHS
Environmental	
Operating Temperature	-10 to 70°C (14 to 158°F)
Operating Humidity	5% to 95% (Non-condensing)
Storage Temperature	-20 to 85°C (-4 to 185°F)

Package Checklist

JetPort is shipped with the following items:

- Korenix JetPort Serial Device Server
- 100-240V Power adapter
- Mounting kit and 4 screws
- 4 Foot pads
- Documentation and Software CD
- Quick Installation Guide



If any of the above items is missing or damaged, please contact your local sales representative.

2

Hardware Installation

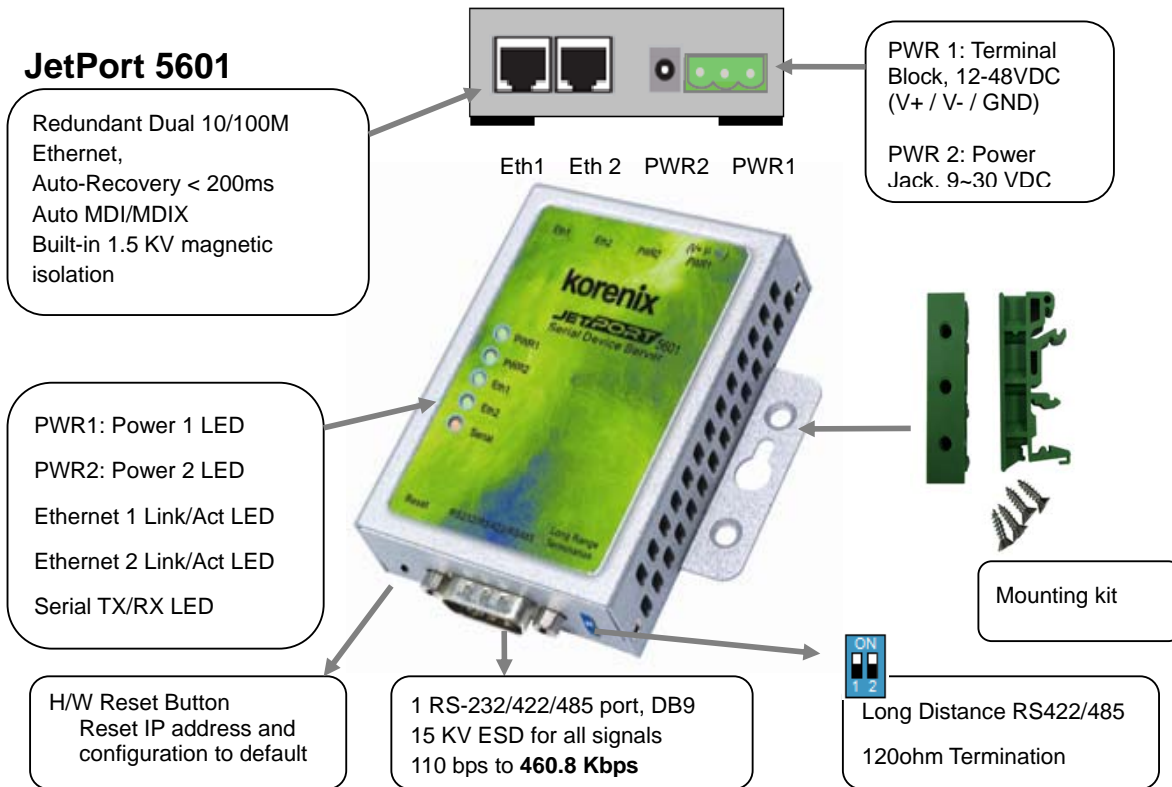
JetPort serial device server can be configured by Windows utility, web browser, or Telnet console. Advanced management features include SNMP support and Email alert. JetPort Commander is a powerful Windows utility that supports device discovery, group setup, group firmware update, and monitoring functions.

This chapter introduces how to quick start JetPort

- **Panel and LED**
- **Reset Button**
- **Connecting the Power**
- **Connecting the Network**
- **Connection the Serial Device**
- **Din-Rail Mounting Installation**

Panel and LEDs

5601 Panel and Interfaces



5601 LED Indicators

There are 5 LEDs in 5601, indicating real-time system status.

LED	Color	Indication
PWR 1	Red	On: Power 1 is on and booting up. Blinking: Indicates an IP conflict, or DHCP or BOOTP server did not respond properly.
	Green	On: Power is on and functioning normally. Blinking: Located by Administrator's Location function.
	Off	Power is off, or power error condition exists.
PWR 2	Red	On: Power 2 is on and booting up. Blinking: Indicates an IP conflict, or DHCP or BOOTP server did not respond properly.
	Green	On: Power 2 is on and functioning normally. Blinking: Located by Administrator's Location function.
	Off	Power is off, or power error condition exists.
Eth 1	Orange	Blinking: 10 Mbps Ethernet connection.
	Green	Blinking: 100 Mbps Ethernet connection.
	Off	Ethernet cable is disconnected, or has a short.
Eth 2	Orange	Blinking: 10 Mbps Ethernet connection.
	Green	Blinking: 100 Mbps Ethernet connection.
	Off	Ethernet cable is disconnected, or has a short.

Serial	Red	Serial port is receiving data.
	Green	Serial port is transmitting data.
	Orange	Serial port is continuously transmitting and receiving data.
	Off	No data is being transmitted or received through the serial port.

5601f Panel and Interfaces

JetPort 5601f

100BaseFX: Duplex SC Multi-mode or Single-mode Fiber



PWR 1: Terminal Block, 12-48VDC (V+ / V- / GND)

PWR 2: Power Jack. 9~30 VDC

PWR1: Power 1 LED
PWR2: Power 2 LED
Fiber Link/Act LED
Serial TX/RX LED



Mounting kit

H/W Reset Button
Reset IP address and configuration to default

1 RS-232/422/485 port, DB9
15 KV ESD for all signals
110 bps to **460.8 Kbps**



Long Distance RS422/485
120ohm Termination

5601f LED Indicators

There are 4 LEDs in 5601f, indicating real-time system status.

LED	Color	Indication
PWR 1	Red	On: Power 1 is on and booting up. Blinking: Indicates an IP conflict, or DHCP or BOOTP server did not respond properly.
	Green	On: Power is on and functioning normally. Blinking: Located by Administrator's Location function.
	Off	Power is off, or power error condition exists.
PWR 2	Red	On: Power 2 is on and booting up. Blinking: Indicates an IP conflict, or DHCP or BOOTP server did not respond properly.
	Green	On: Power 2 is on and functioning normally. Blinking: Located by Administrator's Location function.
	Off	Power is off, or power error condition exists.
Fiber	Green	Blinking: Fiber connection.
	Off	Fiber is disconnected, or has a short.
Serial	Orange	Serial port is receiving data.
	Green	Serial port is transmitting data.
	Off	No data is being transmitted or received through the serial port.

Reset Button

The Reset button provides users with a quick and easy way to restore the default settings of JetPort. Press reset button for 10 seconds. Release after Power LED blinking red. JetPort will restore to default value including default IP address (192.168.10.2), and no password. When the Power LED turns green, the device is ready to function.

Connecting the Power

Terminal Block (PWR1):

1. Insert the positive and negative wires of your DC supply into the V+ and V- contacts of the terminal block connector.



(GND / V- / V+)

2. Tighten the terminal screws to prevent the DC wires from coming loose.



Power Jack(PWR2):

Connect the power jack input with the enclosed 12VDC power adapter, or 24VDC power input. The power LED will show red color until the system is ready. If the IP setting is running correctly, the power LED will turn green.

Note: If the 2 power inputs are connected (PWR 1, PWR 2), the JetPort 5601 will be powered from the highest connected voltage. The unit will not alarm for loss of DC IN power, the alarm function only applies to loss of power at PWR1 or PWR2.

Connecting the Network

JetPort 5601

Connect the Ethernet cable to the JetPort 5601 10/100M Ethernet port 1, 2 or both. The interfaces support auto MDI/MDIX. If both of the Ethernet port 1 and 2 are connected when startup device, the Ethernet port 1 will be the master port, Ethernet port 2 will be the backup. But, if Ethernet port 2 is attached first before attach port 1, the Ethernet port 2 will remain the master port.

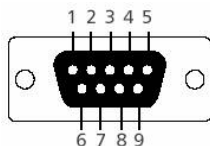
JetPort 5601f

Connect the Multi-mode/Single-mode fiber to the JetPort 5601f. The fiber connector support 100BaseFX, Duplex SC. The fiber cable supports 50/125um or 62.5/125um for 5601f-m; 8/125um, 9/125um or 10/125um for 5601f-s. The maximum distance of JetPort 5601f-m is 2KM, 5601f-s is 30KM.

Connecting the Serial Device

JetPort 5601 serial port is a standard DB9 male port. Connect the serial device to the unit DB9 male port by the pin assignment table. The Long-Range Termination switch can configure 120ohm termination for RS422/4-wire RS485/2-wire RS485.

Pin Assignment



Pin #	RS232	RS422	RS485 (4 wire)	RS485(2 wire)
1	DCD	RXD-	RXD-	
2	RXD	RXD+	RXD+	
3	TXD	TXD+	TXD+	DATA+
4	DTR	TXD-	TXD-	DATA-
5	GND	GND	GND	GND
6	DSR			
7	RTS			
8	CTS			
9	RI			

*RS232 mode act as **DTE**

120ohm DIP

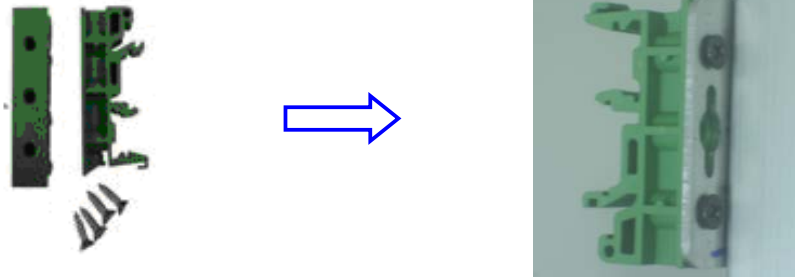


DIP 1	DIP 2	120ohm Termination Configuration
ON	ON	120ohm Terminator for Long Distance 4-wire RS485/RS422
ON	OFF	---
OFF	ON	120ohm Termination for Long Distance 2-wire RS485
OFF	OFF	No Termination for RS232/485 (short distance)

Din-Rail Mounting Installation

Follow these steps to mount the unit to the rail/track.

1. Use a screwdriver to secure the Din-Rail mounting kit to the ear.



Wall-Mounting Kits.

2. Lightly push the 5601 into the rail/track.



The figures show the 5601 is attached on the rail/track well.

3. To remove the unit from the rail/track, reverse steps 1-3.

Notice: Due to the safety concern, Korenix requests users to vertically mount the 5601 device to the rail when using the Terminal Block as the power input. Use the certificated power supply, assured power construction in your factory as the power source.

3

Windows Management Tool

JetPort serial device server provides powerful Windows management tool for multiple device management.

Below are the major functions in JetPort Windows Commander. This chapter introduces you the **Software Quick Setup**. You can know how to install the JetPort Commander and setup the virtual COM mode.

The “JetPort Commander Manual” introduces the full configuration of JetPort commander. You can find the document in product CD or download from Korenix web site.

- **Server Configuration**
 - **Broadcast**
 - **Configuration**
 - **General**
 - **Locate**
 - **Security**
 - **Networking**
 - **Notification**
 - **Management**
 - **Firmware Update**
 - **Save / Reload**
- **Port Configuration**
 - **Port Serial Settings**
 - **Port Service Mode**
 - **Port Notification**
- **Setup Wizard**
 - **Virtual COM Wizard**
 - **Serial Tunnel Wizard**
 - **Group IP Wizard**
 - **Group Setup Wizard**
 - **Group Firmware Wizard**
- **IP Collection**
- **Monitor**

Software Quick Setup

JetPort Commander is an easy-to-use utility with auto device discovery in a LAN or adding devices on the public network. All of the configurations on the serial server can be done in the JetPort Commander. You can also apply configurations of one serial server to the other serial servers. This document shows you how to quick setup the software. The full functions and configurations' description, please refer to the JetPort Commander Manual which you can find in the CD or download from Korenix web site.

Install JetPort Commander

1. Insert the CD and auto-run the program. If the setup does not auto-run, select “JetPort 5601”, and “Operation System”, run JetPort Setup.exe to install Windows utility, JetPort Commander.



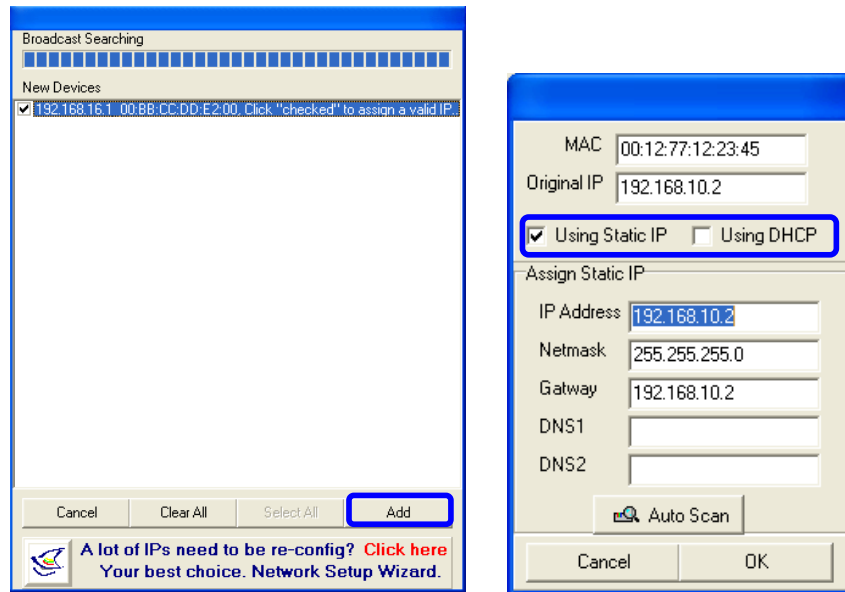
2. When the installation is finished, there are three options:
 - ✓ Launch JetPort Commander Now: Start configurations.
 - ✓ Visit Korenix registration page: Register products to Korenix.
 - ✓ Launch JetPort later: Start configurations later.



3. **Broadcast the JetPort unit:** JetPort Commander will broadcast the network and search all available JetPort units in the network. The default IP address of JetPort is “192.168.10.2”.



Product Tip: If you have multiple Network Adapters (i.e. wireless and wired), please activate ONLY ONE Network Adapter that can locate the JetPort devices, and CLOSE the rest Network Adapters. Otherwise, JetPort Commander may broadcast INCORRECTLY.



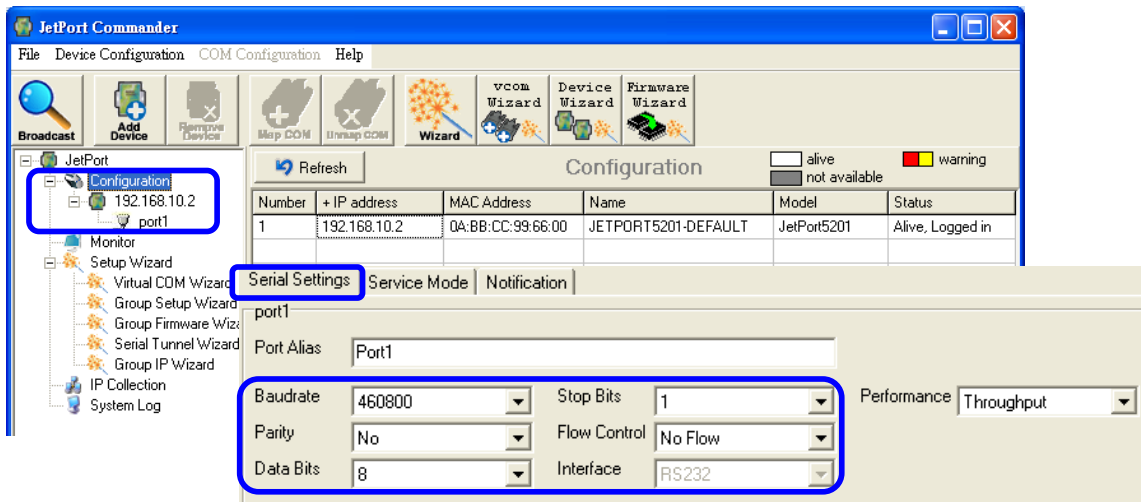
4. Configuring the JetPort unit:

4.1 Click on the JetPort unit and select “Add” for further configuring the unit.

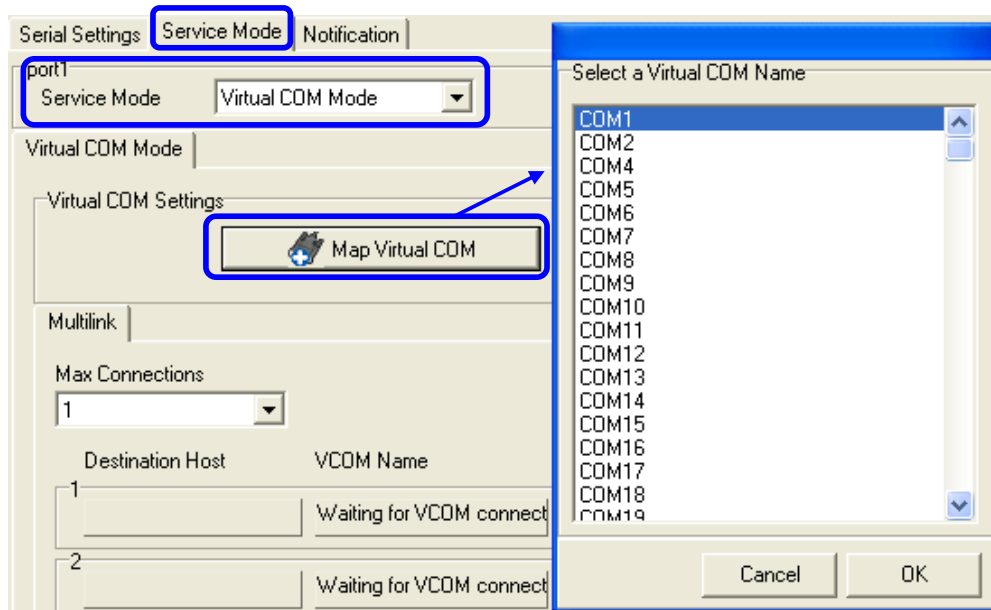
4.2 Select “Static IP” if you want to specify the network parameters, or select “DHCP”, or “BootP” if you want dynamic configuration for the JetPort unit.

5. Configuring the serial port as COM port:

5.1 Go to “Configuration”, and choose the “device” and the “port”. Select “Serial Settings” to configure the serial parameters



5.2 Select “Service mode”, “Virtual COM Mode” and press “Map Virtual COM” to map the port to the COM port.



Congratulations! You have finished JetPort configurations with Virtual COM mode. You can also use web or telnet console by the JetPort IP address.

Note: This document shows you how to quick setup the software. The full functions and configurations' description, please refer to the JetPort Commander Manual which you can find in the CD or download from Korenix web site.

4

Web and Telnet Console

In addition to Windows utility, JetPort 5601 can also be managed by Web-HTTPS and the SSH Console.

The HTTPS is a security protocol that provides communication privacy over the internet. The HTTPS packets transmitted between the JetPort and PC would be encrypted.

The SSH allows users to securely login to remote host computers, to execute commands safely in a remote computer, to securely copy remote files and to provide secure encrypted and authenticated communications between two non-trusted hosts.

This chapter describes:

- **HTTPS Console**
 - Server Configuration
 - Port Configuration
 - Management
 - Save / Restart
- **SSH Console**
 - SSH Client
 - Configuration

Web Console

When the JetPort has been configured with proper IP address and the web management is enabled, you can use web browser to make further configurations.

Type JetPort's IP address in the Address input box, for example <https://192.168.10.2> (Note: you can just type http://, this is not allowed in HTTPS. You should type https://.)



If the JetPort is password protected, use the pre-assigned password to login first.



Model	JetPort5601
IP Address	192.168.10.2
MAC Address	00:00:56:01:02:08
Firmware Version	1.03e

The overview page lists the basic information of this JetPort device.

Server Configuration

Basic Setting configures Server name, Time Server, and Telnet console enable/disable.

Welcome to JetPort Web Commander

Basic Setting

Name	<input type="text" value="JETPORT5601-DEFAULT"/>	
Time		
Time Zone	<input type="text" value="(GMT+08:00)Taipei"/>	
Local Time	<input type="text" value="Thu Jan 1 08:04:39 1970"/>	
Time Server	<input type="text" value="pool.ntp.org"/>	Port <input type="text" value="123"/>
Console		
Telnet Console	<input checked="" type="radio"/> Enable <input type="radio"/> Disable	

Network Setting configures the IP address, netmask, gateway, and DNS server for the JetPort. Auto IP report is for dynamic IP address reporting in defined intervals.

Network Setting

IP Configuration	<input type="text" value="Static"/>
IP Address	<input type="text" value="192.168.10.2"/>
Netmask	<input type="text" value="255.255.255.0"/>
Gateway	<input type="text" value="192.168.10.3"/>
DNS Server 1	<input type="text" value="168.95.1.1"/>
DNS Server 2	<input type="text"/>
Auto IP Report	
Auto Report to IP	<input type="text"/>
Auto Report to TCP Port	<input type="text" value="0"/>
Auto Report Interval	<input type="text" value="0"/> seconds

You can also define Administration password to protect the JetPort from unauthorized modification. Avoid using space in password.

Change Password

Old Password	<input type="text"/>
New Password	<input type="text"/>
Confirm New Password	<input type="text"/>

Port Configuration- Serial Parameter

Port Configuration covers Serial Parameter settings, such as baud rate, data bits, stop bits, parity, and flow control.

Port Alias: Remark the port to hint the connected device.

Baud rate: from 110bps to 460.8kbps

Parity: No, Even, Odd, Mark, Space

Data Bits: 5, 6, 7, 8

Stop Bits: 1, 2 (1.5)

Flow Control: No, XON/XOFF, RTS/CTS, DTR/DSR

Interface: RS232 / RS422 / RS485(2-wires) / RS485(4-wires)

Performance: Throughput, Latency

Throughput mode guarantees highest transmission speed

Latency mode guarantees shortest response time

For advanced data packing options, you can specify delimiters for Serial to Ethernet and / or Ethernet to Serial communications.

You can define max. 4 delimiters (00~FF, HEX) for each way. The data will be hold until the delimiters are received or the optional "Flush Ethernet to Serial data buffer" times out. Zero means disable(factory default).

Serial Setting

	Port1
Port Alias	<input type="text" value="Port0"/>
Interface	RS232
Baud Rate	<div style="border: 1px solid black; padding: 2px;"> RS232 RS422 RS485(2-wires) RS485(4-wires) </div>
Data Bits	
Stop Bits	1
Parity	None
Flow Control	None
Force TX Interval Time	<input type="text" value="0"/> ms
Performance	<input checked="" type="radio"/> Throughput <input type="radio"/> Latency

Port Profile

	Port1
Local TCP Port	<input type="text" value="4000"/>
Command Port	<input type="text" value="4001"/>
Mode	Serial to Ethernet
Flush Data Buffer After	<input type="text" value="0"/> ms
Delimiter(Hex 0~ff)	1: <input type="text" value="00"/> 2: <input type="text" value="00"/> 3: <input type="text" value="00"/> 4: <input type="text" value="00"/>
Mode	Ethernet to Serial
Flush Data Buffer After	<input type="text" value="0"/> ms
Delimiter(Hex 0~ff)	1: <input type="text" value="00"/> 2: <input type="text" value="00"/> 3: <input type="text" value="00"/> 4: <input type="text" value="00"/>

Force TX interval time is to specify the timeout when no data has been transmitted. When the timeout is reached or TX buffer is full (4K Bytes), the queued data will be sent. Zero means disable(factory default).

Service Mode- Virtual COM

In Virtual COM mode, you need to define the available port number, Idle timeout, Alive check, and Max. connections allowed from 1 to 5.

Service Mode

	Port1
Service Mode	Virtual COM Mode ▾
Idle Timeout	0 (0~65535)seconds
Alive Check	420 (0~65535)seconds
Max Connection	1 ▾ max. connection (1~5)

Idle Timeout: When serial port stops data transmission for a defined period of time (Idle Timeout), the connection will be closed and the port will be freed and re-try for connection with other hosts. Zero is disable this setting (default). If Multilink is configured, only the first host connection is effective for this setting.

Alive Check: The JetPort device will send TCP alive check package in each defined time interval (Alive Check) to remote host to test the TCP connection. If the TCP connection is not alive, the connection will be closed and the port will be freed for other hosts. Zero is disable this setting (default).

Service Mode- TCP Server

In TCP Server mode, you need to define the available port number, Idle timeout, Alive check, and Max. connections allowed from 1 to 5.

Service Mode

	Port1
Service Mode	TCP Server Mode ▾
TCP Server Port	4000
Idle Timeout	0 (0~65535)seconds
Alive Check	420 (0~65535)seconds
Max Connection	1 ▾ max. connection(1~5)

Idle Timeout: When serial port stops data transmission for a defined period of time (Idle Timeout), the connection will be closed and the port will be freed and re-try for connection with other hosts. Zero is disable this setting (default). If Multilink is configured, only the first host connection is effective for this setting.

Alive Check: The JetPort device will send TCP alive check package in each defined time interval (Alive Check) to remote host to test the TCP connection. If the TCP connection is not alive, the connection will be closed and the port will be freed for other hosts. Zero is disable this setting (default).

Service Mode- TCP Client

In TCP Client mode, you need to define the destination host IP and port number, Idle timeout, Alive check. To deploy multilink, specify up to 4 more hosts IP and Port number.

Service Mode

	Port1	
Service Mode	TCP Client Mode ▾	
Destination Host	0.0.0.0	: 4000
Idle Timeout	0	(0~65535)seconds
Alive Check	420	(0~65535)seconds
Connect on	<input checked="" type="radio"/> Startup <input type="radio"/> Any Character	
Destination Host	Port	
1.	0.0.0.0	65535
2.	0.0.0.0	65535
3.	0.0.0.0	65535
4.	0.0.0.0	65535

Idle Timeout: When serial port stops data transmission for a defined period of time (Idle Timeout), the connection will be closed and the port will be freed and re-try for connection with other hosts. Zero is disable this setting (default). If Multilink is configured, only the first host connection is effective for this setting.

Alive Check: The JetPort device will send TCP alive check package in each defined time interval (Alive Check) to remote host to test the TCP connection. If the TCP connection is not alive, the connection will be closed and the port will be freed for other hosts. Zero is disable this setting (default).

Connect on Startup: The TCP Client will build TCP connection once the connected serial device is startup.

Connect on Any Character: The TCP Client will build TCP connection once the connected serial device starts to send data.

Service Mode- UDP

In UDP mode, you need to define the destination host IP and Local listen port number.

To create more destination hosts, specify the IP range of destination IP and send port number.

Service Mode

		Port1	
Service Mode	UDP Mode ▾		
Listen Port	4000		
Host start IP	Host end IP	Send Port	
1. 0.0.0.0	0.0.0.0	65535	
2. 0.0.0.0	0.0.0.0	65535	
3. 0.0.0.0	0.0.0.0	65535	
4. 0.0.0.0	0.0.0.0	65535	

Access IP Table

The Access IP Table specifies the IP address and subnet that can access to the device. The access is based on IP and netmask combination.

If the access is open to all hosts, do NOT enable this function.

Access IP Setting

Enable IP Filtering (Not check this option will allow any IP to have assessability)

No.	Activate the IP	IP Address	Netmask
1	<input type="checkbox"/>		
2	<input type="checkbox"/>		
3	<input type="checkbox"/>		
4	<input type="checkbox"/>		
5	<input type="checkbox"/>		
6	<input type="checkbox"/>		
7	<input type="checkbox"/>		
8	<input type="checkbox"/>		
9	<input type="checkbox"/>		
10	<input type="checkbox"/>		
11	<input type="checkbox"/>		
12	<input type="checkbox"/>		
13	<input type="checkbox"/>		
14	<input type="checkbox"/>		
15	<input type="checkbox"/>		
16	<input type="checkbox"/>		

Event Notification

Specify the events that should be notified to the administrator. The events can be alarmed by means of email, SNMP trap, or system log.

Device Notification:

- Hardware Reset (Cold Start): Rebooting the JetPort will trigger the event
- Software Reset (Warm Start): Restarting the computer will trigger the event
- Login Failed: Using wrong password in console will trigger the event
- IP Address Changed: Changing network setting will trigger the event
- Password Changed: Changing the password will trigger the event
- Access IP Blocked: Report blocked IP addresses
- Redundant Power Change: Power change will trigger the event
- Redundant Ethernet Change: Ethernet master port change will trigger the event

Port Notification:

- DCD changed: When DCD (Data Carrier Detect) signal changes, indicating the modem connection status has changed, the event will be triggered.
- DSR changed: When DSR (Data Set Ready) signal changes, indicating that the data communication equipment is powered off, the event will be triggered.
- RI changed: When RI (Ring Indicator) signal changes, indicating the incoming of a call, the event will be triggered.
- CTS changed: When CTS (Clear To Send) signal changes, indicating that the transmission between computer and DCE can proceed.
- Port connected: In TCP Server Mode, when the device accepts an incoming TCP connection, this event will be trigger. In TCP Client Mode, when the device has connected to the remote host, this event will be trigger. In Virtual COM Mode, when Virtual COM is ready to use, this event will be trigger.
- Port disconnected: In TCP Server/Client Mode, when the device lost the TCP link, this event will be trigger. In Virtual COM Mode, When Virtual COM is not available, this event will be trigger.

Select the events and the type of Email, SNMP Trap or Syslog, click Submit to enable it.

Email and SNMP Trap Notification

Email Server configuration includes the mail server's IP address or domain. If the authentication is required, specify the username and password. There are 4 email addresses you can specify to receive the notification.

E-mail Settings	
SMTP Server	<input type="text"/> Port <input type="text"/>
<input type="checkbox"/> My server requires authentication	
User Name	<input type="text"/>
Password	<input type="text"/>
E-mail Address 1	<input type="text"/>
E-mail Address 2	<input type="text"/>
E-mail Address 3	<input type="text"/>
E-mail Address 4	<input type="text"/>

SNMP Trap configuration includes up to 4 Trap Servers. You need to at least fill in one Trap Server's IP or domain. The Community is also required information. Do not use the “;” in this column. Location and Contact is optional information.

SNMP Trap Server	
SNMP Server 1	<input type="text"/>
SNMP Server 2	<input type="text"/>
SNMP Server 3	<input type="text"/>
SNMP Server 4	<input type="text"/>
Community	<input type="text"/>
Location	<input type="text"/>
Contact	<input type="text"/>
Syslog Server	
Syslog Server IP	<input type="text"/>
Syslog Server Port	<input type="text" value="0"/>

Submit

Save / Restart

Load Factory Default: Load default configuration except Network Settings.

Import Configuration: Retrieve saved configuration file to apply in the device. Click Browse to choose the configuration file then click the Import command.

Export Configuration: Save the current configuration into a file and save the file in current host.

Upgrade Firmware: Upgrade to new firmware. Click Browse to select the firmware then click Upgrade command.

SSH Console

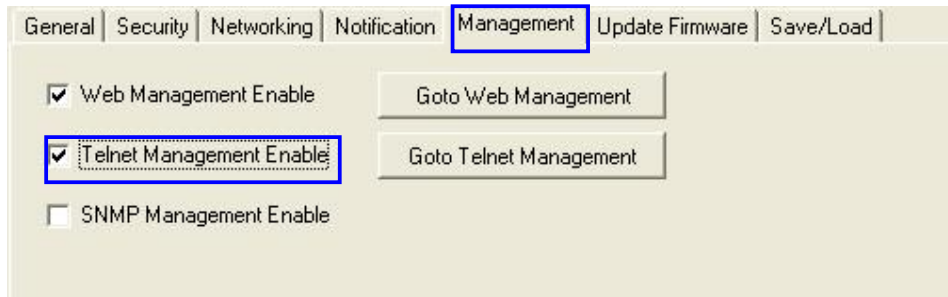
For using SSH, you should open the SSH Client, assign the IP of the JetPort you'd like to access and enter the correct Username/Password, then you can enter the SSH console menu.

SSH Client

There are many free, shareware, trial or charged SSH clients you can find in the internet. For example, PuTTY is a free and popular Telnet/SSH client, we'll use this tool to tell you how to login the JetPort by SSH. Note: *PuTTY is copyright 1997-2006 Simon Tatham.*

Download PuTTY: <http://www.chiark.greenend.org.uk/~sgtatham/putty/download.html>

JetPort Settings: Enable the “Telnet Management Enable” to enable the SSH feature of JetPort 5601/5601f. Click “Goto Telnet Management” will ask you to open the SSH client.



After modifying configuration, be sure to validate the changes by using “Apply Only” or “Apply and Save”.

The copyright of PuTTY

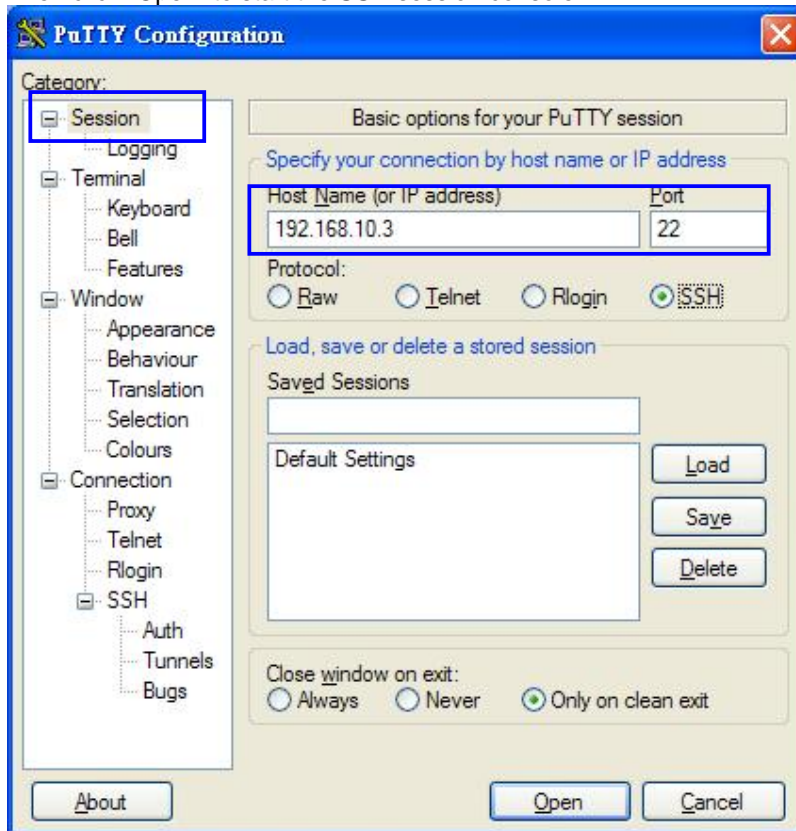


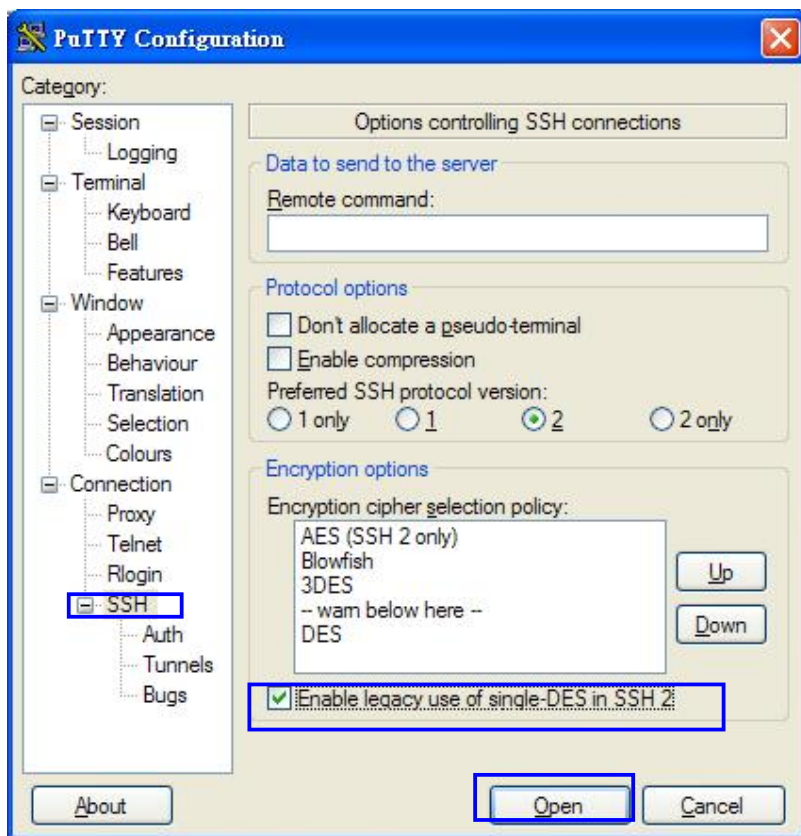
Open the PuTTY

In the Session sub-tree, enter the Host Name (IP Address of your JetPort) and Port number (default = 22). Choose the “SSH” protocol.

In the SSH sub-tree, select the “Enable legacy use of single-DES in SSH2”.

Then click “Open” to start the SSH session console.





SSH Console is opened. The default username of the SSH public key is admin, password is admin. You can see the console as below:

Login as: admin
[admin@192.168.10.3's](#) password: (admin)

```
*****
***      Korenix JetPort Commander      ***
*****
```

Input System Password: ***** (The password you setup in the Jetport commander.)
 Password confirmed. Starting Main Menu.
 You can start to configure your JetPort by SSH console.

```
192.168.10.3 - PuTTY
login as: admin
admin@192.168.10.3's password:

*****
***      Korenix Jetport Commander      ***
*****

Input System Password: *****
Password confirmed. Starting Main Menu.
-----
[Korenix Jetport Commander]
1. Overview
2. General Settings
3. Network Settings
4. Ports settings
5. Security(Accessible IP) Settings
6. Notification(Auto Warning) Settings
C. Change Password
L. Load Factory Default
S. Save configuration
R. Reboot
Q. Exit & Logout

Select one function (1-6,C,L,S,R,Q): █
```

Type the Password you setup in the JetPort Commander.

Configuration

Configure the device and port by pressing function number or the hinted initial.

Press “q” to exit the function.

Always press “a” to apply and save change after making a configuration.

A

SNMP MIB II and RS232 Like Support

Jetport **5601** has build-in SNMP agent that supports SNMP trap, RFC 1317 RS232 MIB and RFC1213 MIB-II. The following tables list SNMP variables implemented in Jetport 5601.

RFC1213 MIB-II supported SNMP variables

System MIB				
sysDescr	sysObjectID	sysUpTime	sysContact	sysName
sysLocation	sysORLastChange	sysORID	sysORDescr	sysORUpTime

Interface MIB				
ifNumber	ifIndex	ifDescr	ifType	ifMtu
ifSpeed	ifPhysAddress	ifAdminStatus	ifOperStatus	ifInOctets
ifInUcastPkts	ifInDiscards	ifInErrors	ifOutOctets	ifOutUcastPkts
ifOutDiscards	ifOutErrors	ifOutQLen	ifSpecific	

Address MIB				
atIfIndex	atPhysAddress	atNetAddress		

IP MIB				
ipForwarding	ipDefaultTTL	ipInReceives	ipInHdrErrors	ipInAddrErrors
ipForwDatagrams	ipInUnknownProtos	ipInDiscards	ipInDelivers	ipOutRequests
ipOutDiscards	ipOutNoRoutes	ipReasmTimeout.	ipReasmReqds	ipReasmOKs
ipReasmFails	ipFragOKs	ipFragFails	ipFragCreates	ipAdEntAddr
ipAdEntIfIndex	ipAdEntNetMask	ipAdEntBcastAddr	ipRouteDest	ipRouteIfIndex

ipRouteMetric1	ipRouteNextHop	ipRouteType	ipRouteProto	ipRouteMask
ipRouteInfo	ipNetToMediaIfIndex	ipNetToMediaPhysAddress	ipNetToMediaNetAddress	ipNetToMediaType
ipRoutingDiscards				

ICMP MIB				
icmpInMsgs	icmpInErrors	icmpInDestUnreachs	icmpInTimeExcds	icmpInParmProbs
icmpInSrcQuenchs	icmpInRedirects	icmpInEchos	icmpInEchoReps	icmpInTimestamps
icmpInTimestampReps	icmpInAddrMasks	icmpInAddrMaskReps	icmpOutMsgs	icmpOutErrors
icmpOutDestUnreachs	icmpOutTimeExcds	icmpOutParmProbs	icmpOutSrcQuenchs	icmpOutRedirects
icmpOutEchos	icmpOutEchoReps	icmpOutTimestamps	icmpOutTimestampReps	icmpOutAddrMasks
icmpOutAddrMaskReps				

TCP MIB				
tcpRtoAlgorithm	tcpRtoMin	tcpRtoMax	tcpMaxConn	tcpActiveOpens
tcpPassiveOpens	tcpAttemptFails	tcpEstabResets	tcpCurrEstab	tcpInSegs
tcpOutSegs	tcpRetransSegs	tcpConnState	tcpConnLocalAddress	tcpConnLocalPort
tcpConnRemAddress	tcpConnRemPort	tcpInErrs	tcpOutRsts	

UDP MIB				
udpInDatagrams	udpNoPorts	udpInErrors	udpOutDatagrams	udpLocalAddress
udpLocalPort				

SNMP MIB				
snmpInPkts	snmpOutPkts	snmpInBadVersions	snmpInBadCommunityNames	snmpInBadCommunityUses
snmpInASNParseErrs	snmpInTooBig	snmpInNoSuchNames	snmpInBadValues	snmpInReadOnlys
snmpInGenErrs	snmpInTotalReqVars	snmpInTotalSetVars	snmpInGetRequests	snmpInGetNexts
snmpInSetRequests	snmpInGetResponses	snmpInTraps	snmpOutTooBig	snmpOutNoSuchNames
snmpOutBadValues	snmpOutGenErrs	snmpOutGetRequests	snmpOutGetNexts	snmpOutSetRequests
snmpOutGetResponses	snmpOutTraps	snmpEnableAuthenTraps	snmpSilentDrops	snmpProxyDrops

RFC1317 RS232 supported SNMP variables

RS232 MIB				
rs232Number	rs232PortIndex	rs232PortType	rs232PortInSigNumber	rs232PortOutSigNumber

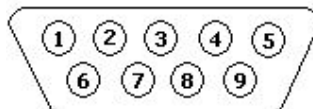
rs232PortInSpeed	rs232PortOutSpeed	rs232PortInFlowType	rs232PortOutFlowType	
rs232AsyncPortIndex	rs232AsyncPortBits	rs232AsyncPortStopBits	rs232AsyncPortParity	rs232AsyncPortAutobaud
rs232AsyncPortParityErrs	rs232AsyncPortFramingErrs	rs232AsyncPortOverrunErrs		
rs232InSigPortIndex	rs232InSigName	rs232InSigState	rs232InSigChanges	
rs232OutSigPortIndex	rs232OutSigName	rs232OutSigState	rs232OutSigChanges	

B

RS232 Pin Assignment

Pin No.	Name	Notes/Description
1	DCD	Data Carrier Detect
2	RD	Receive Data (RxD, Rx)
3	TD	Transmit Data (TxD, Tx)
4	DTR	Data Terminal Ready
5	SGND	Ground
6	DSR	Data Set Ready
7	RTS	Request To Send
8	CTS	Clear To Send
9	RI	Ring Indicator

RS232 DB9 Male



C

Revision History

Version	Description	Date
V1.0	The first released version.	Aug. 2006
V1.1	Add Din-Rail Mount Installation and notice.	Mar. 2007
V1.2	Correct Serial Port LED color.	Oct. 2008
V1.3	Remove Linux TTY driver	July 2009