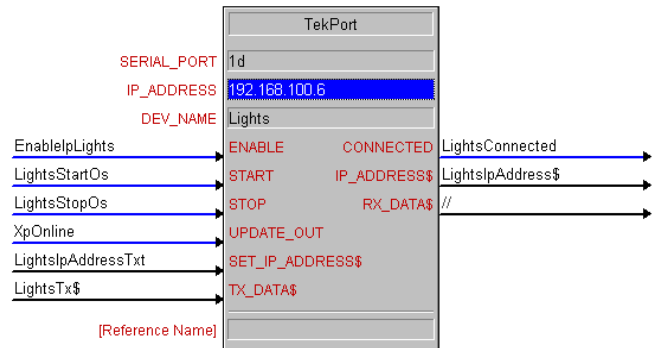


In large multimedia systems it is quite common to have more serial controlled devices than the control system has serial ports. With Crestron™ control systems you may need to use an AV2-PRO or add several ST-COMs. These large control systems can get expensive. Sometimes a job might only require a few serial controlled devices and to save money you installed a small Crestron MC2e or AMX NI-2100 controller. A year later and sometimes during the installation your customer wants to add video conferencing and camera control to this system and there are no open serial ports on the controller. You are now left with the choice of changing out the controller or adding expensive Crestron ST-COMs or AMX NXC-COM2.

TEKVOX has a better solution, the TekPort Device Server allows you to add eight or sixteen serial ports in a single 1RU device to a Crestron™ or AMX™ control system. The TekPort connects to the control system via Ethernet and is easy to install and program. Configuring a TekPort is easy and only requires the setting of its IP address. TEKVOX also provides your programmer with simple to use modules for both AMX and Crestron. The Crestron module basically takes the place of the serial port connections that is typically set in the Central Control Modules. With the Creston TekPort module there is no need to add an Ethernet TCP/IP-Client, set IP tables or Ports. Just select which serial port you want to communicate with on the TekPort. With AMX it might be more difficult since most modules are written to communicate with the device. It is best to include the TCP/IP connection in your device module.



Benefits

- Low cost serial port expansion
- Easy setup, configuration and programming
- High speed LAN connection
- Allows for smaller controllers
- Allows for extended distances



The TekPort is made by MOXA and is preconfigured to work with the AMX and Crestron modules supplied by TEKVOX. On the front of the TekPort is a menu driven LCD and keypad allowing for easy configuration of the network settings. The following are preconfigured settings from TEKVOX:

- Network settings: DHCP
- Serial Port setting: 9600 baud, 8-bit, 1 stop bit, no parity, and no flow control.
- Web server password: **TekPort01**

Since the TekPort is preconfigured from TEKVOX, the only required settings are the Network and Serial Port. These settings can easily be made through the TekPort web server or front panel LCD. Note that the web server is password protected from TEKVOX (TekPort01).

TekPort Configuration Models

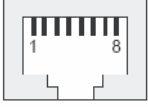
TekPort 5610-8	8 Port RS-232	TekPort 5650-8	8 Port RS-232/RS-422/RS-485
TekPort 5610-16	16 Port RS-232	TekPort 5650-16	16 Port RS-232/RS-422/RS-485

- Serial Interface

Serial Standards	RS-232/422/485
Number of Ports	8 or 16
Connectors	RJ45 (8 pins)
Serial Line Protection	15 KV ESD protection for all signals
RS-485 Data Direction Control	ADDC® (automatic data direction control)

- Serial Communication Parameters

Data Bits	5, 6, 7, 8
Stop Bits	1, 1.5, 2
Parity	None, Even, Odd, Space, Mark
Flow Control	DSR/DTR and RTS/CTS (RS-232 only), XON/XOFF
Baudrate	50 bps to 921.6 Kbps

Connector	Pin	RS-232	RS-422 4-wire	RS-485	2-wire RS-485
 RJ45	1	DSR	---	---	---
	2	RTS	TxD+	---	---
	3	GND	GND	GND	GND
	4	TxD	TxD-	---	---
	5	RxD	RxD+	Data+	Data+
	6	DCD	RxD-	Data-	Data-
	7	CTS	---	---	---
	8	DTR	---	---	---

RS-232 Wiring Trick

Most RS-232 devices have a DC voltage on their Transmit pin. So if you wire the device you want to control first (pins 2, 3 & 5), and then check for voltage between pin 5 (ground) and the other wires. The wire that has voltage should go to the controller's Receive connection. For the TekPort RJ45 RX is pin 5. For DB 9 male connectors like AMX and Crestron pin 2 is RX.



- Software

Network Protocols	ICMP, IP, TCP, UDP, DHCP, BOOTP, Telnet, DNS, SNMP, HTTP, SMTP, SNMP, ARP, PPP, SLIP, RTelnet, RFC2217
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Driver Support	Windows Real COM driver (for Windows 95, 98, ME, NT, 2000, XP, 2003, Vista, XP x64, 2003 x64, Vista x64), Linux Real TTY driver, Fixed TTY driver (for SCO Unix, SCO OpenServer, UnixWare 7, UnixWare 2.1, SVR 4.2, QNX 4.25, QNX 6, Solaris 10, FreeBSD, AIX 5.x, HP-UX 11i)
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Configuration Options	Web Console, Telnet Console, Windows Utility
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- Physical Characteristics

Enclosure	SECC sheet metal (1 mm), providing IP30 protection
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Weight	NPort® 5650-8: 3360 g NPort® 5650-8-S-SC: 3380 g NPort® 5650-8-M-SC: 3380 g NPort® 5650-16: 3460 g NPort® 5650-16-S-SC: 3440 g NPort® 5650-16-M-SC: 3440 g
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Dimensions	Without ears: 440 x 45 x 198 mm (17.32 x 1.77 x 7.80 in) With ears: 480 x 45 x 198 mm (18.90 x 1.77 x 7.80 in)
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- Environmental Limits

Operating Temperature	0 to 55°C (32 to 131°F)
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Operating Humidity	5 to 95% RH
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Storage Temperature	-20 to 75°C (-4 to 167°F)
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• Power Requirements

Input Voltage	100 to 240 VAC, 47 to 63 hz
Power Consumption	NPort® 5650-8/16: 158 mA @ 100 VAC, 102 mA @ 240 VAC NPort® 5650-8/16-S-SC: 164 mA @ 100 VAC, 110 mA @ 240 VAC NPort® 5650-8/16-M-SC: 174 mA @ 100 VAC, 113 mA @ 240 VAC
Power Line Protection	4 KV burst (EN61000-4-4: EFT/B), 2 KV surge (EN61000-4-5)

• Regulatory Approvals

Safety	UL (UL60950-1), TÜV (EN60950-1)
EMC	CE (EN55022 Class A, EN55024), FCC Part 15 Subpart B Class A
Medical	EN60601-1-2 Class B, EN55011

• Reliability

Alert Tools	Built-in buzzer and RTC (real-time clock)
Automatic Reboot Trigger	Built-in WDT (watchdog timer)
MTBF (meantime between failures)	NPort® 5650-8: 117584 hrs NPort® 5650-16: 104767 hrs NPort® 5650-S-SC-8: 116914 hrs NPort® 5650-S-SC-16: 87528 hrs NPort® 5650-M-SC-8: 116914 hrs NPort® 5650-M-SC-16: 87528 hrs

• Warranty

Warranty Period	5 years
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