

## RS-232C 4 port Serial I/O Unit for USB COM-4CX-USB



\* Specifications, color and design of the products are subject to change without notice.

### Features

#### Max. 921,600bps RS-232C Serial Communication)

This product has 4 port RS-232C-standard COM ports. Baud rates from 300 to 921,600bps can be set for each port. When data is transferred at the high speed, it may not be transferred normally, depending on the use environment such as the external device and cable length used.

#### Possibly used as Windows-standard COM ports, using the bundled driver library

Comes with a driver software that allows the boards to be used under Windows in the same way as COM ports on the PC.

It supports to use under Windows-standard Win32 API communication function, Visual Basic MSComm or .NET Framework 2.0 SerialPort class.

#### Each channel is equipped with separate 128-byte / 384-byte FIFO buffers for transmit and receive.

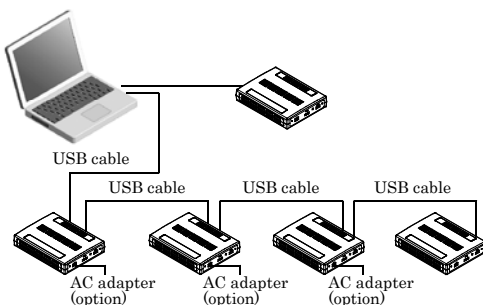
These are FIFO format, useful for high speed communications and to reduce the load to the CPU when transmitting/receiving.

#### Compatible to USB1.1/USB2.0

Compatible to USB1.1/USB2.0 and capable to achieve high speed transfer at Full Speed (12 Mbps).

#### USB HUB function

This product has the USB HUB function. Max. 4 COM-4CX-USB can be used in 1 USB port of PC. \*1 When you use 4 or more COM-4CX-USB, you can do by connecting COM-4CX-USB to the another USB port of PC side. \*2 Also, you can connect the CONTEC's USB device other than COM-4CX-USB to the USB port of COM-4CX-USB. \*3\*4



\*1 This product cannot be stacked up for installation.

\*2 When you use the USB port included on the COM-4CX-USB, use 5VDC power supply for self-power. For more details on the connection with 5VDC power supply, refer to chapter2 - step3, "Connection with 5VDC Power Supply for Self-power".

\*3 Do not connect the device other than that of CONTEC's USB to the USB port included on the COM-4CX-USB. Otherwise, this may cause a failure or malfunction.

\*4 When connecting multiple units with USB HUB function and set up them, do one at a time and complete setup for the previous unit before starting to do the next unit.

This product is an USB2.0-compliant unit designed for extending RS-232C compatible serial communication functionality on your PC.

This product supports a baud rate of up to 921,600bps and has separate 128-byte / 384-byte buffer memory for transmit and receive.

It also comes with a Windows driver, which allows products to be used as OS-standard COM ports.

### Specification

Item	Specification
<b>I/O</b>	
Number of ports	4 port
Interface type	RS-232C
Transfer method	Asynchronous serial transfer
Baud rate	300 - 921,600bps *1 *2 *7
Data length	7, 8 bits 1, 2 stop bits *1
Parity check	Even, Odd, Non-parity *1
Controller chip	XR21V1414 or equivalent (Mounting the FIFO memory as the common buffer of RS-232C communication and USB. Each channel has 384-byte receive and 128-byte transmit FIFO buffers.)
<b>USB section</b>	
Bus specification	USB Specification 2.0/1.1 standard
USB transfer rate	12Mbps (Full-speed) *3
Power supply	Either self-power or bus-power can be used. *4
<b>Common section</b>	
Number of terminals used at the same time	63 terminals (Max.) *5
Current consumption (Max)	5VDC 200mA
Operating temperature *6	0 - 50°C, 10 - 90%RH (No condensation)
Connecting distance	15m (Typ.)
Dimension (mm)	180(W) x 140(D) x 34(H) (No protrusions)
Weight	300g (Not including the USB cable, attachment)
Connector	9-pin D-SUB connector, DELC-J9PAF-20L9 [mfd. by JAE, M(male) type] equivalent
Attached cable	USB cable 1.8m
Standard	VCCI Class A, FCC Class A, CE Marking (EMC Directive Class A, RoHS Directive)

\*1 These items can be set by software.

For the "Standard COM Driver Software COM Setup Disk" on the supplied CD-ROM, the range is 300 - 921,600 bps.

\*2 Data transmission at high speed may not be performed normally depending on the environment including the type of status of connected material of cable and environment.

\*3 This depends on the PC environment used (OS and USB host controller).

\*4 If using a bus-power hub, use self-power for the COM-4CX-USB.

\*5 As a USB hub is also counted as one device, you cannot just connect 63 USB unit.

\*6 To suppress the heating, ensure that there are spaces for ventilation (about 5cm) around this product.

\*7 It becomes 230,400bps or less when using it for three or above simultaneous ports.

## Support Software

### Standard COM Driver Software COM Setup Disk (Bundled)

Under Windows, this software allows you to use the serial ports on the converter as if they were standard COM ports on the PC. By connecting additional units, you can use COM ports in the range COM1 - COM256. Under Windows, the serial ports can be accessed using the standard Win32 API communication routines (CreateFile(), WriteFile(), ReadFile(), and SetCommState(), etc.) The serial ports are also compatible with the Visual Basic communication control (MSComm). Supports the communication class of .NET Framework 2.0 (SerialPort class).

You can download the updated version from the CONTEC's Web site (<http://www.contec.com/downloadaddr.html>).

For more details on the supported OS, applicable language and new information, please visit the CONTEC's Web site.

### CAUTION

- The maximum number of COM ports able to be used depends on the configuration of your OS.
- ServicePack 1 or later is necessary to use it by Windows 2008 Server or Windows Vista.
- ServicePack 3 or later is necessary to use it by Windows 2003 Server or Windows XP.
- It is recognized as another COM port when replacing the universal serial bus port and putting on the USB hub and substituting it.
- API-SIO(98/PC) is not used.

## Accessories (Option)

USB I/O Unit Bracket for X Series \*1: BRK-USB-X

AC adapter (input: 90 - 264VAC, output: 5VDC 2.0A: POA200-20-2

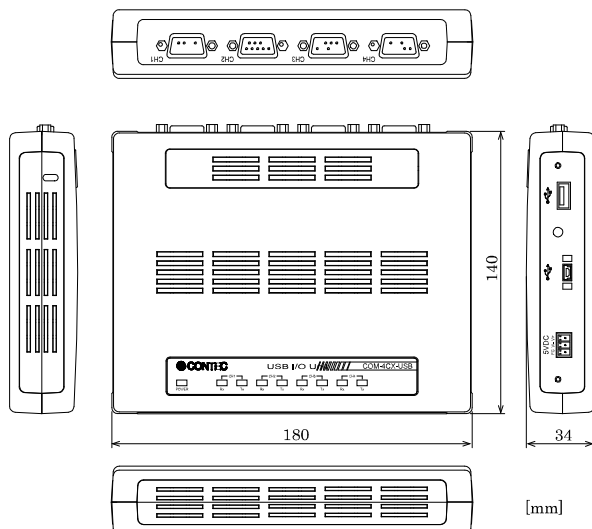
- \*1 With this product, only the USB port side is fixable.
- \* Check the CONTEC's Web site for more information on these option

## Packing List

- Unit [COM-4CX-USB] ...1
- USB cable (1.8m) ...1
- USB cable attachment on the main unit's side  
(For Mini B connector side) ...1
- Clamps for prevention of cable on the main unit's side ...1
- Disk \*1 [COM Setup Disk] ...1
- Power connector MC1,5/3-ST-3,5 ...1
- First step guide ... 1
- Ferrite core ...1
- Warranty Certificate...1
- Serial number label ...1

\*1 The Disk contains the driver software and User's Guide.

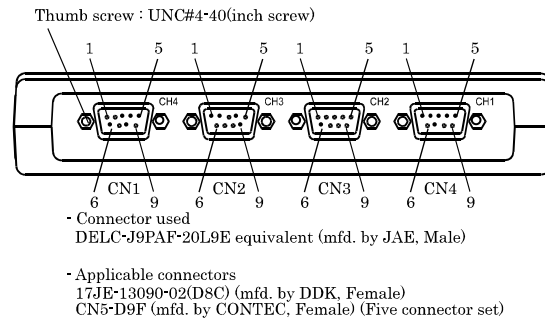
## Physical Dimensions



## Using the Connectors

### Connecting to a Connector

To connect an external device to this product, plug the cable from the device into the interface connector of unit shown below.



### Connector Pin Assignment

#### Pin Assignments of COM-4CX-USB Interface Connector

