### N Series for USB RS-232C 4ch Serial I/O Unit

### COM-4CN-USB



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

This product is a USB2.0-compliant product designed for extending four channels of 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.

- \* The contents in this document are subject to change without notice.
- \* Visit the CONTEC website to check the latest details in the document.
- \* The information in the data sheets is as of September, 2017.

## **Features**

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

This product has 4 channel RS-232C-standard serial ports. Baud rates from 300 to 921,600bps can be set for each port. When using the bundled "Standard COM Driver Software", baud rates from 300 to 921,600bps can be set. 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 products to be used under Windows in the same way as COM ports on the PC.

Under Windows, the product supports the OS-standard Win32 API communication function as well as Visual Basic MSComm.

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).

Compact Design

Compact design, 188.0(W)  $\times$  78.0(D)  $\times$  30.5(H), features flexibility in installation.

Run by USB buspower

Not necessary to power this product externally as the bus power of USB is used

Diverse installations such as screw fastening, magnet (option), DIN rail are possible

Installation on the floor / wall /ceiling is possible by screw fastening, magnet (option), rubber feet, etc.

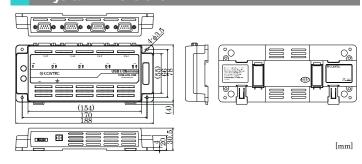
In addition, DIN rail mounting mechanism is equipped as standard with the product, making it easy to install the product within the panel or the device.

# **Specification**

Item	Specifications	
1/0		
Number of channels	4ch	
Interface type	RS-232C	
Transfer method	Asynchronous serial transfer	
Baud rate	300 - 921,600bps *1 *2 *5	
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.)	
USB section		
Bus specification	USB Specification 2.0/1.1 standard	
USB transfer rate	12Mbps (Full-speed) *3	
Power supply	Bus Power	
Common section		
Current consumption (Max.)	5VDC 105mA	
Operating temperature *4	-20 - 60°C, 10 - 90%RH(No condensation)	
Connecting distance	15m (Typ.)	
Dimension (mm)	188.0(W) x 78.0(D) x 30.5(H) (No protrusions)	
Weight	230g (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 bundled disk, 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 To suppress the heating, ensure that there are spaces for ventilation (about 5cm) around this product.

#### **Physical Dimensions**



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## **Packing List**

Product [COM-4CN-USB] ...1

External toothed lock screw

(M4 x 5, Use for earth terminal)...1

Rubber feet...4

USB cable (1.8m) ...1

USB cable attachment on the main product's side

(For Mini B connector side) ...1

Disk \*1 [COM Setup Disk] ...1

First step guide ... 1

Warranty Certificate ...1

Serial Number Label ...1

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

# **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 products, 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 (SerialPort class).

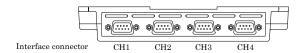
For more details on the supported OS, applicable language and new information, please visit the CONTEC's Web site.

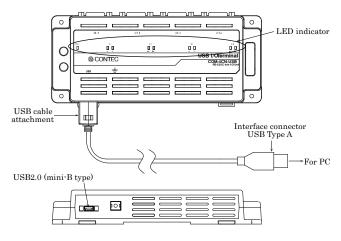
## **List of Options**

Magnets for installation (For piece Set)

: CPS-MAG01-4

## Name of each parts





#### LED indecator



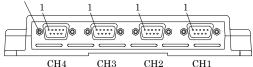
LED	Meaning	Status
POWER (Green)	Power status	OFF: Power has not been supplied. ON: Power has been supplied.
RxD (Yellow)	Reception status	OFF: It indicates receiving data by the RS-232C in standby ON: It indicates receiving data by the RS-232C.
TxD (Green)	Transmission status	OFF: It indicates sending by the RS-232C in standby. ON: It indicates sending data by the RS-232C.

# **Connection Method**

### Interface Connector

Use the interface connectors of the product to connect with external devices

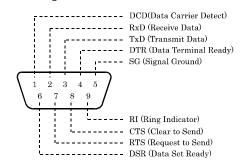
Thumb screw: UNC#4-40(inch screw)



- Connector used
- DELC-J9PAF-20L9E equivalent [mfd. by JAE,Male]
- Applicable connectors
  - 17JE-13090-02(D8C) [mfd. by DDK, Female]

### Connector Pin Assignment

Pin Assignments of COM-4CN-USB Interface Connector



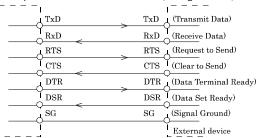
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 $<sup>^{\</sup>star}$  Check the CONTEC's Web site for more information on these options.

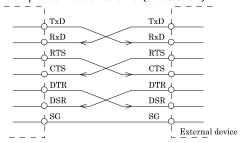
# Types of Cable and Example Connections

When using an RS-232C interface, different cables are required depending on the type of device to which you are connecting (computer or modem, etc.). Check the requirements of the external device and select either a straight-through or crossed (null modem) cable as appropriate. If special treatment of the signal lines in the connector is required, ensure that this is done in accordance with the specifications.

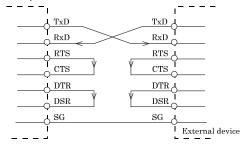
### Example Connection to a Modem (Straight cable)



#### Example Connection to a PC (Cross cable)



#### Example Connection to a Device



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