

2 Channel RS-232C LAN Converter LNX-203 User's Manual Ver. 1.0

| | 2 Channel LAN to H | S-232C CONVER | TER | HUMANDATA | |
|---|--------------------|---------------|-----|-----------------------|--|
| | POWER | | | SYS BUSY O microSD | |
| < | | | | | |

HuMANDATA LTD.

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• Precautions

| | 1 | This product uses ordinary off-the-shelf electronic components, and |
|-----------------------------|----|---|
| \sim | | is therefore inappropriate for use in applications that require special |
| | | quality or reliability and are expected to protect human lives or |
| | | prevent accidents, such as safety mechanisms in fields including |
| Do Not | | space, aeronautics, medicine, and nuclear power. |
| | 2 | Do not be used underwater or in high-humidity environments. |
| | 3 | Do not be used in the presence of corrosive gases, combustible gases, |
| | | or other flammable gases. |
| | 4 | Do not turn on power when circuit board surface is in contact with |
| | | other metal. |
| | 5 | Do not apply voltage higher than rated voltage. |
| | | |
| • | 6 | This manual may be revised in the future without notice owing to |
| $\mathbf{\Lambda}$ | | improvements. |
| /!\ | 7 | All efforts have been made to produce the best manual possible, but |
| Attention | | if users notice an error or other problem, we ask that they notify us. |
| 8 Item 7 no | | Item 7 notwithstanding, HuMANDATA cannot be held liable for the |
| consequences ar | | consequences arising from use of this product. |
| 9 HuMANDATA cannot l | | HuMANDATA cannot be held liable for consequences arising from |
| | | using this product in a way different from the uses described herein, |
| | | or from uses not shown herein. |
| | 10 | This manual, circuit diagrams, sample circuits, and other content |
| | | may not be copied, reproduced, or distributed without permission. |
| 11 If the proc | | If the product emits smoke, catches fire, or becomes unusually hot, |
| cut the powe | | cut the power immediately. |
| 12 Do not install the | | Do not install the control cables or communication cables together |
| with the main circuit lines | | with the main circuit lines or power cables. In such an environment, |
| it may result in malfu | | it may result in malfunction due to noise. |
| | 13 | Be careful of static electricity. |

Revision History

| Date | Revision | Description |
|------------------|----------|-----------------|
| December 6, 2018 | v1.0 | Initial release |

• Introduction

Thank you very much for purchasing our product LNX-203.

LNX-203 is a 2 channel RS-232C LAN converter which makes it possible to use 2 channels of RS-232C devices via Ethernet local area network.

1. Product Configuration

The following lists the product configuration of the LNX-203.

| 2 Channel RS-232C LAN Converter (LNX-203) | 1 |
|--|---|
| microSD card with USB adapter | 1 |
| D-Sub 9pin M2.6 screw (#4-40 UNC is mounted) | 4 |
| AC adapter (DC5V) | 1 |
| Driver & Application CD | 1 |

2. Product Summary

LNX-203 is a 2 channel RS-232C LAN converter which makes it possible to use 2 channels of RS-232C port from single LAN port via Ethernet local area network. Tunneling mode (transparent mode: connected on one-to-one connection without PC) is available with LNX-203 using LAN. By using TCP/UDP or Telnet, direct control from PC is also available.

LNX-203 supports PoE. That makes it possible to be powered via a LAN cable (PoE compatible HUB or other is required). It can also be powered by the AC adapter. Network setting can be saved to and restored from a microSD card. Restoring the setting information from a microSD card is very convenient when replacing LNX-203.

3. Overview

3.1. Block Diagram





3.2. Front Side



LEDs

| | Name (color) | Function | |
|---|---|--|--|
| POWER | POWER Power LED (red) Turn on during the power is supplied. | | |
| RX Reception LED (red) Turn on when data is received from | | Turn on when data is received from RS-232C side. | |
| TX Transmitter LED (red) Turn | | Turn on when data is transmitted to $	ext{RS-232C}$ side. | |
| SYS | System LED (red) | Blink few seconds during reading process. Turn on when system is ready. | |
| BUSY | micro SD card access LED (red) | Turn on during accessing micro SD card. When it turned off, you can extract the card. | |



3.3. Rear Side



LAN side and RS-232C side is isolated.

LEDs

| Name (color) | | Function | |
|--------------|--------------------|---|--|
| ACT | Active LED (green) | Turn on during network port communication. | |
| LINK | Link LED (yellow) | Turn on when the power is supplied and LAN cable is connected normally. | |



4. Specifications

| Item | Description | Remarks |
|------------------------|---|-----------------------------------|
| Model | LNX-203 | |
| Domon | 5VDC, Supplied by AC adapter or LAN | PoE function supports |
| Power | connector (PoE function) | both mode A and B |
| Current Consumption | Less than 350mA | |
| | IEEE802.3 (10Base-T) | |
| Network Interface | IEEE802.3u (100Base-TX) | |
| | half-duplex / full-duplex (auto detected) | |
| | | ESD protection $\pm 11 \text{KV}$ |
| LAN Connector | RJ45 | isolation over |
| | | 1500Vrms |
| Protocol | TCP / UDP / Telnet | |
| T | | |
| Input/Output Interface | RS232C x 2 channel | ESD protection ± 15 KV |
| | D-Sub 9pin Male | M2.6 screws are also |
| RS-232C Connector | (#4-40 UNC screws are mounted) | attached for accessary |
| | | For save and restore |
| Setting Memory Card | microSD card | the product setting |
| | | SPI mode |
| | 300, 600, 1200, 2400, 4800, 9600, 19200, | |
| Baud Rate | 38400, 57600, 115200, 230400, 460800, | |
| | 921600 bps | |
| Data Bits | 7 or 8 bits | |
| Stop Bits | 1 or 2 bits | |
| Parity | Even, Odd, No parity | |
| | POWER: Power LED | |
| | RX: Receiver LED x 2 | |
| | TX: Transmitter LED x 2 | |
| LED | SYS: System LED | |
| | BUSY: micro SD card access LED | |
| | LINK (RJ45 Connector): LINK Status | |
| | ACT (RJ45 Connector): ACT Status | |



| Operating Ambient Temp. | -10 to 55 [°C] (14 to 131 [°F]) | |
|-------------------------|---------------------------------|---------------------|
| Operating Ambient Humi. | 30 to 85 %RH | No condensation |
| Storage Ambient Tem. | -20 to 60 [°C] (-4 to 140 [°F]) | permitted |
| Storage Ambient Humi. | 30 to 85 % RH | |
| Weight | Approx. 300 [g] | Only main body |
| Dimonsions | 165 x 80.5 x 39 [mm] | Without projections |
| Dimensions | (6.496" x 3.169" x 1.535") | without projections |

* There may be cases that these parts and specifications are changed.

* Power saving function (suspend, standby, sleep and others) is not supported

* Please use the microSD card that is included in the package.

| Item | Description | Remarks |
|-------------------------|---------------------------------|---------------------------|
| Output | 5VDC 2.0A | |
| Plug | 2.1mm inner diameter | Positive Tip |
| Compatible DC Jack | 2.1mm inner diameter | |
| Operating Ambient Temp. | 0 to 40 [°C] (32 to 104 [°F]) | |
| Operating Ambient Humi. | 30 to 85 % RH | No condensation permitted |
| Storage Ambient Temp. | -20 to 80 [°C] (-4 to 176 [°F]) | |
| Storage Ambient Humi. | 10 to 95 % RH | |
| Wire Length | 1.6m | |
| Weight | approx. 70 [g] | |
| Dimongiong | 46 x 34 x 25 [mm] | Without projections |
| Dimensions | 1.811" x 1.339" x 0.984" | without projections |

4.1. AC adapter (Japan's specifications)

* This AC adapter is attached for use mainly in Japan. If you use in the other countries, please check the specifications above and plug shape.

* There may be cases that this part and specifications are changed.



4.2. Optional Accessories

| Model Name | Image | Description | |
|------------|-------|---|--|
| ACC-027 | | Metal bracket type A for vertical mounting USB/LNX series JAN : 4937920801096 | |
| ACC-028 | | Metal bracket type A for horizontal mounting USB/LNX series JAN : 4937920801102 | |
| ACC-031 | | Din rail attachment type B for USB/LNX series JAN : 4937920801256 | |
| ACC-036 | 000 | Neodymium magnet set for USB/LNX series JAN : 4937920801539 | |

4.3. Power Supply

LNX-203 supports PoE function both A and B type as standard which make it possible to be powered via a LAN cable (PoE compatible HUB is required). It also can be powered by the AC adapter.

| Pin No | Name | Direction | Remarks |
|--------|--------|-----------|-----------------|
| 1 | (DCD) | In | Data carrier |
| T | | | detect |
| 2 | RXD | In | Receive data |
| 3 | TXD | Out | Transmit data |
| | DTR | Out | Data terminal |
| 4 | | | ready |
| 5 | GND | - | Signal ground |
| 6 | DSR | In | Data set ready |
| 7 | RTS | Out | Request to send |
| 8 | CTS | In | Clear to send |
| 9 | (RING) | In | Ring indicator |
| CASE | FG | - | Connect to GND |

5. RS232C Pin Assignment





* DCD and RING signals are not supported.

* #4-40 UNC screws are mounted by factory setting. You can change them to attached M2.6 screws.

6. Connection examples

[Tunneling mode between two LNX-203]



Direct communication between two LNX-203s without any PCs offers you a way to connect separated RS-232C devices.

[Tunneling mode between LNX-203 and two LNX-002 with RS-232C]



Direct communication between LNX-203 and LNX-002 without any PCs offers you a way to connect separated RS-232C devices.

[LNX-203 single operation]



Communication with RS-232C devices via a local area network is available.



[Connect LNX-203 and LAN printer and output from microcomputer and PLC devices]



Send print data to remote network printer using RS-232C interface of microcomputer and PLC devices.

* Please use a cross cable to connect LNX-203 without using a hub.

(LNX-203 does not have a function for AutoMDI/MDI-X.)



7. Setting Tool

Setting tool supports to save and read network setting by a microSD card. This tool does not require installation.

| microSD ca | eading data | Savin | ng data | Read/V | Nrite from Ne | twork |
|--|------------------------------------|----------|-------------------------------------|------------------------|---------------|-------|
| Asic Remo Network set IP address 0.0 | ting | ion(1/2) | Extension(2/ Default gater | z) way]. 0.[| 0 | |
| 255.255.2 [CH.A] Conn Port number 10001 | ection setting Protcol TCP ~ | ~ | [CH.8] Conn Port number 10002 | ection setting r Pr | otcol CP V | |
| [CH.A] Seria | i setting | | [CH.8] Serial | setting | | |
| baudrate | 9600 | ~ | baugrate | 9000 | | |
| Flow control | None | ~ | Flow control | None | | 1 |
| Stop bits | 1 | ~ | Stop bits | 1 | | |
| Parity | None | ~ | Parity | None | | ` |
| Data bits | 8 | ~ | Data bits | 8 | | |
| nformation | in the microSD card | | | | Product | elect |
| HUMANDATA | support page] | | | | Product s | ciect |
| X series | www.fa.hdl.co.ip/ip/inx-h | nome.htr | <u>ni</u> | | Copy to clip | oboar |
| apport page | www.fa.hdl.co.jp/jp/inx-s | uport.h | umi | | | |

This is a screenshot from version 2.0

7.1. Access Flow of microSD card





7.2. Function

| microSD ca | ard | | Read/Write from | Network |
|--------------|---|-------------------|-----------------|-----------|
| R. | eading data | saving data | 1 | etwork |
| asic Remo | te(Tunneling mode) Extension | (1/2) Extension(2 | /2) | |
| Network set | ting | | | |
| IP address | | Default gate | eway | |
| 0.0 | 0.0.0 | 0.0 | | |
| Subnet mas | k | _ | | |
| 255.255.2 | 55.0 | ~ | | |
| [CH.A] Conn | ection setting | [CH.8] Con | nection setting | |
| Port number | Protcol | Port numbe | er Protcol | |
| 10001 | TCP ~ | 10002 | TCP 🗸 | |
| [CH.A] Seria | lisetting | [CH.B] Serie | al setting | |
| Baudrate | 9600 | U Baudrate | 9600 | ¥ |
| Flow control | None | ✓ Flow control | None | ~ |
| Stop bits | 1 | ✓ Stop bits | 1 | Ŷ |
| Parity | None | ~ Parity | None | ~ |
| Data bits | 8 | ✓ Data bits | 8 | Ŷ |
| | | | | |
| formation | in the microSD card | | | |
| | | | Produ | ct select |
| N series | support page] www.fa.hdl.co.jp/jp/inx-hom | e.html | Copy to | clipboard |
| pport page | www.fa.hdl.co.jp/jp/nx-sup | ort.html | | |
| | | | | brit |

| Item | Contents |
|-------------------|---|
| Reading data | Read setting data (RD_DATA.txt) from microSD card. |
| Saving data | Save setting data (WR_DATA.txt) to microSD card. |
| Natara | Read or write setting data over the network. LNX product and PC |
| Network | must be connected to the same network segment. |
| Product select | Display product select window. |
| Copy to clipboard | Copy a display image to clipboard. |
| Exit | Terminate the application. |

[Basic Setting]

| Basic Ren | note(Tunneling mode) | Extension(1/2) | Extension(2/ | (2) |
|-------------|----------------------|----------------|--------------|-----------------|
| Network se | tting | | | |
| IP address | | | Default gate | way |
| 0. | 0.0.0 | | 0.0 | . 0 . 0 |
| Subnet ma | sk | | | |
| 255.255. | 255.0 | ~ | | |
| [CH.A] Con | nection setting | | [CH.B] Conn | nection setting |
| Port numbe | er Protcol | | Port number | r Protcol |
| 10001 | TCP | | 10002 | TCP 🗸 |
| [CH.A] Seri | al setting | | [CH.B] Seria | l setting |
| Baudrate | 9600 | \sim | Baudrate | 9600 ~ |
| Flow contro | None | ~ | How control | None v |
| Stop bits | 1 | ~ | Stop bits | 1 ~ |
| Parity | None | ~ | Parity | None v |
| Data bits | 8 | ~ | Data bits | 8 ~ |
| | | | | |
| | | | | |

| | Contents | | | |
|---|---|--|--|--|
| If DHCP is not used to assign an IP address, enter it manually. | | | | |
| Unique IP address must be used in the network. The default | | | | |
| setting is 0.0.0.0 | setting is 0.0.0.0 (DHCP is enabled) | | | |
| A subnet mask defines the number of bits taken from the IP | | | | |
| address that are assigned for the host part. | | | | |
| A gateway addre | ess of a router which is allowed to communicate to | | | |
| other LAN segments. This address should be an IP address of the | | | | |
| router which is in the same LAN segment. | | | | |
| Enter the local port number. The default setting is 10001. | | | | |
| If you change the value, please avoid the following numbers. They | | | | |
| are allocated to other function. | | | | |
| 1-1024 | Reserved for well-known ports | | | |
| 9999 | Reserved for telnet setup | | | |
| 14000-14009 | Reserved for old redirector | | | |
| 30704 | Reserved for remote control of user I/Os | | | |
| 30718 | Reserved for configuration | | | |
| | If DHCP is not u Unique IP address setting is 0.0.0.0 A subnet mask of address that are A gateway address other LAN segmerouter which is it Enter the local p If you change the are allocated to of 1-1024 9999 14000-14009 30704 30718 | | | |



| | From the drop-down menu, select TCP or UDP. |
|--------------|---|
| Protocol | Normally TCP is used, but when one-to-multiple communication |
| Frotocol | like broadcast or sensitive-responsiveness is needed, please select |
| | UDP. The default setting is TCP. |
| | LNX-203 and an attached serial device must agree on the baud |
| Doudroto | rate to use for the serial connection. Valid baud rates are 300, 600, |
| Dauurate | 1200, 2400, 4800, 9600, 19200, 38400, 57600, 115200, 230400, |
| | 460800 or 921600. The default setting is 9600. |
| | Flow control manages data flow between devices in a network to |
| | ensure it is processed efficiently. Too much data arriving before a |
| Flow control | device is prepared to receive it causes lost or retransmitted data. |
| | Select from None, Xon/Xoff, Xon/Xoff Pass Chars to Host or |
| | RTS/CTS (hardware). The default setting is none. |
| Stop bits | Select from 1 or 2 bit. The default setting is 1. |
| Parity | Select from Even, Odd or None. The default setting is none. |
| Data bits | Select from 7 or 8 bit. The default setting is 8. |



[Remote Setting (Tunneling Mode)]



| Item | Contents |
|-------------------|--|
| Remote Setting | Select to enable remote connection (tunneling) |
| (Tunneling mode) | The default setting is disable |
| Enable/Disable | |
| Remote IP address | Enter the remote IP address of tunneling target. |
| Remote Port | Enter the new ste next number of turneling to next |
| number | Enter the remote port number of tunneling target. |
| Connection method | Select connection method to the target. |

[Extension Setting (1/2)]

| asic Remote(Tunneling mode) Extension(1/2) | Extension(2/2) |
|---|--|
| Setting range : 0~65sec 5 sec (0 : Disable) | |
| [CH.A] Pack control | [CH.B] Pack control |
| ◯ Enable | Enable Disable |
| Idle gap time 12 [msec] 💛 | Idle gap time 12 [msec] \sim |
| Trigger character | Trigger character |
| ○ 1 byte ○ 2 byte string | ○ 1 byte ○ 2 byte string |
| Any string(HEX) 0x 00 0x 00 | Any string(HEX) 0x 00 0x 00 |
| Check sum in None 1 byte 2 byte | Check sum None 1 byte 2 byte |
| [CH.A] Telnet Com port control(RFC2217) Disable Disable | [CH.B] Telnet Com port control(RFC2217) ① Disable ① Enable |

| Item | Contents |
|----------------|--|
| | TCP keepalive time defines how many seconds LNX-203 waits |
| | during an inactive connection before checking its status. If the unit |
| TCP keepalive | does not receive a response, it drops that connection. Enter a value |
| | between 0 and 65 seconds. 0 disables keepalive. |
| | The default setting is 5. |
| | Select to enable pack control. |
| | Two packing algorithms define how and when packets are sent to the |
| | network. The standard algorithm is optimized for applications in |
| | which the unit is used in a local environment, allowing for very small |
| Pack control | delays for single characters, while keeping the packet count low. The |
| Enable/Disable | alternate packing algorithm minimizes the packet count on the |
| | network and is especially useful in applications in a routed Wide |
| | Area Network (WAN). Adjusting parameters in this mode can |
| | economize the network data stream. |
| | The default setting is disable. |



| | Select idle gap time from 12, 52, 250 or 5000 msec. |
|-------------------|--|
| Idle gap time | After this idle gap time with no response from a serial device, data is |
| | packetized and transmitted to the target. The default setting is 12. |
| Trigger character | Select packet size and set trigger character (hexadecimal digits). |
| Check sum | Select check sum size. |
| | Set to enable when control COM port using Telnet. |
| Telnet Com port | The product enable a RFC2217 function to use a control signal used |
| control (RFC2217) | in a serial port on a network. When it is not used this function, set to |
| | disable. |

[Extension Setting (2/2)]

| Basic Remote(Tunneling mode) Extension(1/ | 2) Extension(2/2) |
|---|----------------------------------|
| [CH.A] I/O Buffer clear setting | [CH.B] I/O Buffer clear setting |
| Input buffer from serial to LNX | Input buffer from serial to LNX |
| With network connect | With network connect |
| O Yes No | O Yes O No |
| With network disconnect | With network disconnect |
| O Yes No | Yes No |
| Output buffer from LNX to serial | Output buffer from LNX to serial |
| With network connect | With network connect |
| O Yes O No | O Yes O No |
| With network disconnect | With network disconnect |
| O Yes No | Vies No |
| | |

| Item | Contents |
|------------------|---|
| I/O buffer clear | Set it whether input/output buffer clear at the time of network |
| setting | connection or disconnection. |



7.3. Write Setting Data

- 1. Open Setting Tool for LNX series (LNX SETTING TOOL Ver*.*).
- 2. Select "LNX-203 2ch LAN to RS232C Converter", and click "OK".

| Product select | × |
|--|---|
| Please select the product, and push the OK button. | |
| LNX-203 2ch. LAN to RS232C Converter 🗸 🗸 | |
| 言語 〇日本語 ④ English OK | |
| HUMANDATA. | |

- 3. Enter the setting such as network or serial.
- 4. Insert a microSD card to PC (A USB adapter is included with the product)
- 5. Click "Saving data".



| microSD ca | eading data | Savir | ng data | Read/ | Write from Network |
|---|--|--------|-------------------------------------|-------------------|-----------------------|
| Asic Remo Network set IP address 192 . 10 Subnet mas 255.255.2 | te(Tunneling mode) Extension ang 88 . 0 . 100 k 55.0 | v(1/2) | Extension(2/ Default gater | 2) way . 0. | 0 |
| [CH.A] Conn Port number 10001 | Protcol TCP ~ | | [CH.8] Conn Port number 10002 | ection settin | ng rotcol TCP ~ |
| [CH.A] Seria | setting | | [CH.B] Serial | setting | |
| Baudrate | 9600 | ~ | Baudrate | 9600 | Ý |
| Flow control | None | \sim | Flow control | None | ~ |
| Stop bits | 1 | ~ | Stop bits | 1 | ~ |
| Parity | None | ~ | Parity | None | ~ |
| Data bits | 8 | ~ | Data bits | 8 | ~ |
| nformation | in the microSD card | | | | |
| HUMANDATA | support page] | | | | Product select |
| X series | www.fa.hdl.co.jp/jp/inx-ho | me.ht | ml La | | Copy to clipboard |
| whom hade | www.ta.hdi.co.jp/jp/inx-su | Jorth | Uni | | 1 |

6. Click "OK" in the confirmation dialog.



- 7. Specify the microSD card as saving destination. Please do not change the file name from "WR_DATA.TXT".
- 8. Remove the microSD card from PC and insert it to the product. Please confirm that the product power is turned off.

9. When the product is powered on, the setting data is configured to the product automatically. After the data is stored in the product, microSD card is not needed any more. The start-up time can be shortened if the microSD card is removed from the product.

Please be careful not to detach the microSD card before TX/RX LED is turned off.



7.4. Read Setting Data

- 1. After confirming the power is off, insert the microSD card to the product.
- When the product is powered on, the setting data will be reserved to the microSD card automatically. The data file name is "RD_DATA.TXT".
 Please be careful not to detach the microSD card before TX/RX LED is turned off.
 * If there is the same file name in the microSD card, the data will be overwritten.
- 3. Insert a microSD card to PC (A USB adapter is included with the product)
- 4. Start the setting tool and click "Reading data".

| Network sett | | | (2) | |
|---------------|---------------------|----------------------------------|-----------------|-----|
| The address | ng | 0.6.4 | | |
| 0 0 | | 0 0 | | |
| Subnet mask | | | | |
| 255.255.25 | i5.0 × | * | | |
| [CH.A] Conne | ction setting | [CH.8] Conn | nection setting | |
| Port number | Protcol | Port number | r Protcol | |
| 10001 | TCP ~ | 10002 | TCP 🗸 | |
| [CH.A] Serial | setting | [CH.B] Seria | al setting | |
| Baudrate | 9600 | Baudrate | 9600 | ~ |
| Flow control | None | Flow control | None | ~ |
| Stop bits | 1 | Stop bits | 1 | v |
| Parity | None | v Parity | None | ~ |
| Data bits | 8 | ✓ Data bits | 8 | v |
| | | | | |
| nformation | in the microSD card | | | |
| | | | | |
| | | | Product sele | ect |
| | | | | |



5. Click "OK" in the confirmation dialog.



- 6. Open the "RD_DATA.TXT" in the microSD card.
- 7. Setting data is loaded.

| microSD ca | ard | | | Read/W | /rite from Network |
|------------------------------|---|---------------|--------------|----------------|--------------------|
| N | eading data | SD Savi | ng data | 1 | S Network |
| Basic Rem | ote(Tunneling mode) Ex | stension(1/2) | Extension(2/ | 20 | |
| Network set | the | | | | |
| IP address | | | Default gate | way | |
| 192 . 1 | 68 . 0 . 100 | | 0.0 | | 0 |
| Subnet mat | * | | | | |
| 255.255.2 | 255.0 | v | | | |
| (OI.A) Com | ection setting | | (CH.8) Com | ection setting | |
| Port number | r Protool | | Portnumbe | r Pro | loot |
| 10001 | TOP ~ | | 10002 | TO | p ∨ |
| (OH.A) Serie | al setting | | (OH.8) Seria | setting | |
| Baudrate | 9600 | v | Baudrate | 9600 | ~ |
| Flow control | None | v | Flow control | None | ų |
| Stop bits | 1 | v | Stop bits | 1 | v |
| Parity | None | v | Parity | None | v |
| Data bits | 8 | ¥ | Data bits | 8 | Ý |
| Information | in the microSD card | | | | |
| MAC address Firmware : Ve | : 0080A393806D r. 1. 1.06.A0 | | | 1 | Product select |
| HUMANDATA | support page] | | | | |
| JNX series | : www.fa.hdl.co.sp/tp | /nx-home.ht | ai - | | Copy to clipboard |
| | www.fa.hdl.co.to.to.to. | Inx-suport.h | dm . | 1 | |



7.5. Write or Read setting data over the network

- 1. Enter the setting such as network or serial and click "Network".
 - * Please confirm that microSD card is not inserted in a product.

| LNX S | ETTING TOOL Ver2.0 | | | - | |
|----------------|------------------------|----------------|----------------|--------------|-------------|
| micros | 5D card | micro | | Read/Write f | rom Network |
| lasic | Remote(Tunneling mode) | Extension(1/2) | Extension(2/2) | | |
| IP add 192 | k setting iress | | Default gatewo | ay . 0. 0 | |
| Subne 255.2 | t mask 255.255.0 | ~ | | | |

2. Enter an IP address manually or click "Search". When some products are found, please select a number from a list.

| Read/Write from N | ead/Write from Network | | \times | |
|----------------------|------------------------|--------------|----------|--|
| O Input IP addre | Search | | | |
| 192 168 0 4 | | Update | | |
| Search results | Search results | | | |
| No | IP address | MAC address | | |
| 1 | 192.168.0.4 | 0080A3937CC9 | | |
| 2 | 192.168.0.100 | 0080A3BCBF90 | | |
| | | | | |
| Read data Write data | | | | |
| Done | | | | |

- 3. Click "Read data" or "Write data"
 - * Even if some devices will be listed in the list and occur process time out. In this case, please change the PCs' network setting to the same network segment as the product or using microSD card.

7.6. Setting Example

[Tunneling mode between LNX-203 (Ch A to Ch A, Ch B to Ch B)]



| LNX-203 | | LNX-203 |
|-----------------|-----------------|---------------|
| Network Setting | | |
| 192.168.0.100 | IP Address | 192.168.0.101 |
| 255.255.255.0 | Subnet Mask | 255.255.255.0 |
| 0.0.0.0 | Default Gateway | 0.0.0.0 |

| Ch A Setting | | | |
|---------------------------------|--------------------|---------------------|--|
| 10001 | 10001 Port Number | | |
| TCP | Protocol | ТСР | |
| Ch A Remote Setting (Tunneling) | | | |
| 192.168.0.101 | Remote IP Address | 192.168.0.100 | |
| 10001 | Remote Port Number | 10001 | |
| Ch A Serial Communication | | | |
| 230400 | Baud rate | 19200 | |
| RTS/CTS (hard ware) | Flow Control | RTS/CTS (hard ware) | |
| 1 | Stop Bits | 1 | |
| None | Parity | None | |
| 8 | Data Bits | 8 | |



| Ch B Setting | | | | |
|---------------------|---------------------------------|---------------------|--|--|
| 10002 | Port Number | 10002 | | |
| ТСР | Protocol | ТСР | | |
| Ch | Ch B Remote Setting (Tunneling) | | | |
| 192.168.0.101 | Remote IP Address | 192.168.0.100 | | |
| 10002 | Remote Port Number | 10002 | | |
| Cł | n B Serial Communicati | on | | |
| 230400 | Baud rate | 19200 | | |
| RTS/CTS (hard ware) | Flow Control | RTS/CTS (hard ware) | | |
| 1 | Stop Bits | 1 | | |
| None | Parity | None | | |
| 8 | Data Bits | 8 | | |

Communication with different baud rate is available as shown above. But please be sure to confirm the timing before running.



[LNX-203 single operation]



| LNX-203 | Side |
|---------|------|
|---------|------|

| Network Setting | | |
|-----------------|---------------|--|
| IP Address | 192.168.0.100 | |
| Subnet Mask | 255.255.255.0 | |
| Default Gateway | 0.0.0.0 | |

| Ch A Setting | | |
|---------------------------------|---------------------|--|
| Port Number | 10001 | |
| Protocol | TCP | |
| Ch A Remote Setting (Tunneling) | | |
| Remote IP Address | 0.0.0.0 | |
| Remote Port Number | 0 | |
| Serial Communication | | |
| Baud rate | 230400 | |
| Flow Control | RTS/CTS (hard ware) | |
| Stop Bits | 1 | |
| Parity | None | |
| Data Bits | 8 | |



| Ch B Setting | | |
|---------------------------------|---------|--|
| Port Number | 10002 | |
| Protocol | TCP | |
| Ch A Remote Setting (Tunneling) | | |
| Remote IP Address | 0.0.0.0 | |
| Remote Port Number | 0 | |
| Serial Communication | | |
| Baud rate | 9600 | |
| Flow Control | None | |
| Stop Bits | 1 | |
| Parity | None | |
| Data Bits | 8 | |





[Connect LNX-203 and LAN printer and output from microcomputer and PLC devices]

| LNX-203 | | Printer |
|-----------------|-----------------|---------------|
| Network Setting | | |
| 192.168.0.100 | IP Address | 192.168.0.101 |
| 255.255.255.0 | Subnet Mask | 255.255.255.0 |
| 0.0.0.0 | Default Gateway | 0.0.0.0 |

| Ch A Setting | | |
|---------------------------------|--------------------|------|
| 10001 | Port Number | 9100 |
| TCP | Protocol | - |
| Ch A Remote Setting (Tunneling) | | |
| 192.168.0.101 | Remote IP Address | - |
| 9100 | Remote Port Number | - |
| Ch A Serial Communication | | |
| 230400 | Baud rate | - |
| RTS/CTS (hard ware) | Flow Control | - |
| 1 | Stop Bits | - |
| None | Parity | - |
| 8 | Data Bits | - |

When you connect LAN printer to also Ch B side, please set the parameters as shown above.



8. Virtual COM Port

You can use the software that creates Virtual COM ports on your PC. You can use the COM port to communicate to an IP address of LNX-203. Rather than going out the local port, the data is transmitted across the Ethernet network using TCP/IP. LNX-203 attached to the network receives the data and transfers it from its own serial port to the attached equipment. Please refer to the "LNX series virtual COM port User's Manual" that are stored on the product supplied CD for details.

9. Additional Documentation and User Support

The following documents and other supports are available at https://www.hdl.co.jp/en/faspc/LNX/lnx-203

- LNX SETTING TOOL
- Virtual COM Port
- Outline Drawing ... and more.

10. Warranty and Compensation

Please refer to the following URL for the warranty. https://www.fa.hdl.co.jp/en/fa-warranty.html

2 Channel RS-232C LAN Converter LNX-203

User's Manual

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