

# CN2610 Series Quick Installation Guide

Fifth Edition, June 2008

#### 1. Overview

Welcome to the Moxa CN2610 dual-LAN terminal server, a communication server with 8 or 16 RS-232 ports and dual 10/100 Mbps Ethernet LAN ports. The CN2610 dual-LAN terminal server can be used to connect terminals, modems, printers, and other serial devices to LAN hosts. Rhw CN2610 complies with TCP/IP and IEEE 802.3 specifications using standard Ethernet 10/100BaseT and twisted pair 10/100BaseTX cable as the transmission medium.

# 2. Package Checklist

The CN2610 dual-LAN terminal server products are shipped with the following items:

- 1 CN2610 Terminal Server
- 1 power cord (AC models only)\*
- · Document and & Software CD-ROM
- Quick Installation Guide (this guide)
- 1 DB9 serial cable (CBL-RJ45F9-150)
- 1 DB25 serial cable (CBL-RJ45M25-150)
- \* Power cords are available with US, Euro, UK, and JP plugs.

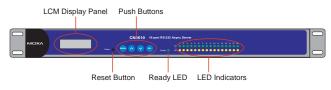
#### Optional Accessories

- CBL-RJ45M9-150: RJ45 (8-pin) to DB9 (male) cable, 150 cm
- CBL-RJ45F9-150: RJ45 (8-pin) to DB25 (female) cable, 150 cm
- CBL-RJ45M25-150: RJ45 (8-pin) to DB25 (male) cable, 150 cm
- CBL-RJ45F25-150: RJ45 (8-pin) to DB25 (female) cable, 150 cm

NOTE: Notify your sales representative if any of the above items are missing or damaged.

#### 3. Hardware Introduction

## Front Panel



P/N: 1802026000213

LED	Color	Description		
Reset	None Press the Reset button for 5 seconds to load fact defaults. The CN2610 will beep twice when the configuration has been reset.			
Ready	Red	Used for configuring the IP address and other parameters.		
	Green	Lights up when the CN2610 system is ready.		
Serial Tx	Green	Flashes to indicate serial port transmission.		
Serial Rx	Yellow	Flashes to indicate serial port reception.		

#### Rear Panel



Connector	Function				
AC Power	Automatic detection of 100-240V, 47-63 Hz AC power				
Input	supply (CN2610-8 or CN2610-16).				
Power On/Off	Lindicates never an O indicates never off				
Switch	I indicates power on; O indicates power off.				
RS-232	O D145				
Console Port	One RJ45 connector for console terminal connection.				
LAN1	Auto detecting 10/100 Mbps port.				
LAN2	Auto detecting 10/100 Mbps port.				
Serial Ports	8 or 16 RJ45 connectors for DCE (modem) connections.				

## LCM Display

We recommend using the LCM display and four push buttons to configure the IP address for the first time.

## **Basic Operation**

If the CN2610 is working properly, the LCM panel will display a green color. The red Ready LED will also light up, indicating that the CN2610 is receiving power. After the red Ready LED turns to green, you will see a display similar to the following:

C	N	2	6	1	0	·	1	6		3				
1	9	2		1	6	8		1	2	7	2	5	4	

CN2610-16: The CN2610's name
03: The CN2610's serial number
192.168.127.254: The CN2610's IP address

There are four push buttons on the CN2610's nameplate. Going from left to right, the buttons are:

Button	Name	Action		
MENU	menu	Activates the main menu, or returns to an upper level.		
^	up cursor	Scrolls up through a list of items shown on the LCM panel's second line.		
~	down cursor	Scrolls down through a list of items shown on the LCM panel's second line.		
SEL	select	Selects the option listed on the LCM panel's second line.		

The buttons are manipulated in a manner similar to the way a modern cellular phone operates. As you move through the various functions and setting options, note that the top line shows the current menu or submenu name, and the bottom line shows the submenu name or menu item that is activated by pressing the SEL button.

Refer to CN2610 User's Manual for more details.

## 4. Hardware Installation

#### 1. Installing the CN2610

Open the package, and attach the CN2610 to a desktop, or fasten it to the rack cabinet.

#### 2. Wiring Requirements

- A. Use separate paths to route wiring for power and devices. If power wiring and device wiring paths must cross, make sure the wires are perpendicular at the intersection point.
- B. NOTE: Do not run signal or communication wiring and power wiring in the same wire conduit. To avoid interference, wires with different signal characteristics should be routed separately.
- C. Where necessary, we strongly advised that you label wiring to all devices in the system.

#### 3. Connecting Power

AC: Connect the CN2610 100-240 VAC power line with its AC connector. If the power is properly supplied, the "Ready" LED will show a solid red color until the system is ready, at which time the "Ready" LED will change to a green color.

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#### 4. Connecting to the Network

Connect one end of the Ethernet cable to the CN2610's 10/100M Ethernet port and the other end of the cable to the Ethernet network. There are 2 LED indicators located on the top left and right corners of the Ethernet connector. If the cable is properly connected, the CN2610 will indicate a valid connection to the Ethernet in the following ways:



The top right corner LED indicator maintains a solid green color when the cable is properly connected to a 100 Mbps Ethernet network.



The top left corner LED indicator maintains a solid orange color when the cable is properly connected to a 10 Mbps Ethernet network.

## 5. Connecting to a Serial Device

Connect the serial data cable between the CN2610 and the serial device.

#### 6. Connecting to a Console

A console is a combination of keyboard and monitor, and is used to configure settings and to monitor the status of your system. If you do not have a network environment, use a terminal, a PC running UNIX, or a PC with terminal emulation software (e.g., HyperTerminal in Windows; PComm by Moxa). Use an RJ45-to-DB25 or RJ45-to-DB9 cable to connect the terminal to the console socket. Refer to the CN2610 User's Manual for more details.

#### 5. Software Installation

## **Entering the Console Utility**

Console Utility is the main application needed to set up the server/port configuration, and to execute utilities such as ping, diagnosis, monitor, and upgrade. There are two ways to enter the Console Utility. One is to use terminal emulation through a console terminal, and the other is to telnet from a network terminal.

Refer to the CN2610 User's Manual for more details.

# 6. Pin Assignments and Cable Wiring

#### 10/100BaseTX Port Pinouts

Pin	Signal	
1	Tx+	1 8
2	Tx-	
3	Rx+	
6	Rx-	

# **Console Port Pinouts**

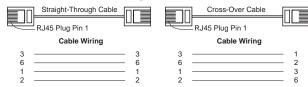
	001100101	101110000
Pin	RS-232	
1	DSR (in)	1 8
2	RTS (out)	
3	GND	
4	TxD (out)	
5	RxD (in)	
6	DCD (in)	
7	CTS (in)	
8	DTR (out)	

#### **RS-232 Port Pinouts**

Pin	RS-232	
1	DSR (in)	1 8
2	RTS (out)	
3	GND	
4	TxD (out)	
5	RxD (in)	
6	DCD (in)	
7	CTS (in)	

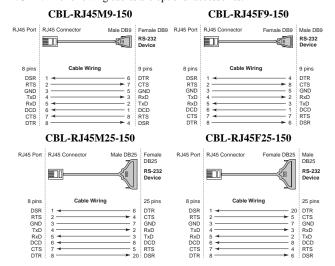
DTR (out)

## 10/100BaseTX Cable Wiring



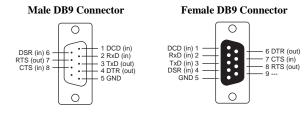
## RS-232 Cable Wiring

**NOTE:** The following cables are optional accessories.



#### **DB9 and DB25 Connector Pinouts**

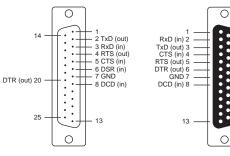
The following figures illustrate standard connector pinouts. However, pinouts for serial devices differ from manufacturer to manufacturer. Refer to the serial device's user's manual for the exact pinouts of your device.



#### Male DB25 Connector

## Female DB25 Connector

20 DSR (in)



# 7. Environmental Specifications

## **Power requirements**

Power Input 100 to 240 VAC, 47 to 63 Hz

Power Consumption CN2610-8/16 235 mA for 100V, 145 mA for 240V

Operating temperature 0 to 55°C (32 to 131°F)

Storage temperature -20 to 70°C (-4 to 158°F), 5 to 95% RH

Dimensions (W×D×H)  $198 \times 45 \times 440 \text{ mm}$ 

 $(7.8 \times 1.77 \times 17.3 \text{ in})$ 

Surge protection 15 KV ESD for serial ports

Magnetic isolation 1.5 KV for Ethernet ports

Power line protection 1 KV Burst (EFT), EN61000-4-4

2 KV Surge, EN61000-4-5

Regulatory approvals **EMC:** CE: EN55022 Class A/EN55024

FCC: FCC part 15 subpart B, Class A

**Safety:** UL: UL60950 TUV: EN60950

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