UNOnext Wiring Guide

ver 1.5

2021/6/23

As long as UNOcentral is connected to a power supply, the system will begin to operate. Through the HDMI connection on the back of UNOcentral, UNOcentral's screen can be output to displays with HDMI interfaces, such as computer monitors and TVs. UNOcentral is managed through a web GUI. Users can remotely manage UNOcentral through the browsers of other hosts, or directly output UNOcentral to a display and use a USB keyboard and mouse for management. To use UNOcentral remote management or other network services, it is recommended to connect the network cable to the LAN1 port on the back of UNOcentral (The MAC address of LAN1 is provided on the UNOcentral's label). As shown in Figure 1
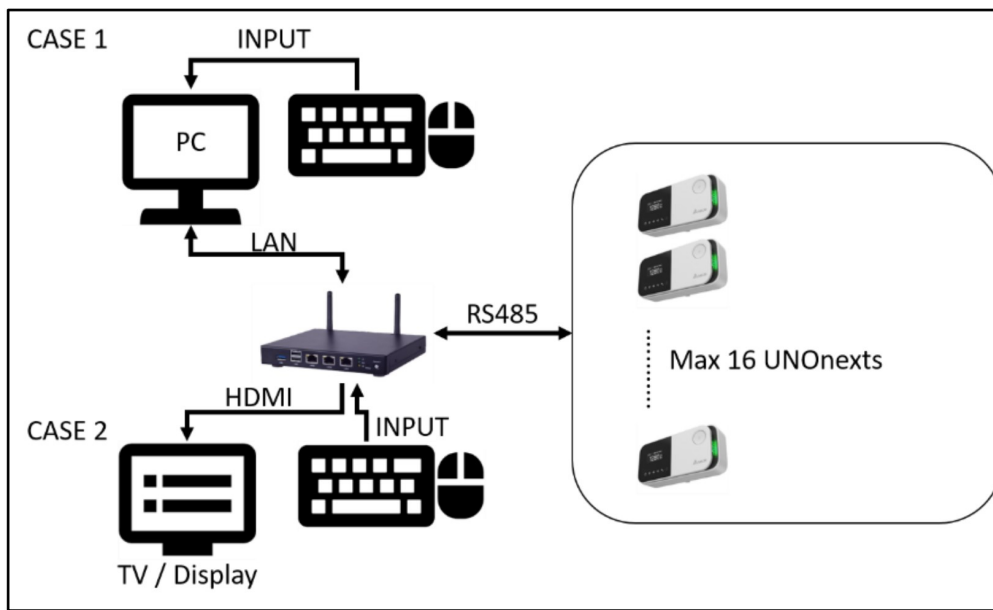

Figure 1   Example of UNOcentral management method (connection via RS485)

If RS485 communication interface is used between UNOcentral and UNOnext, they must be used Daisy-Chain, and the communication mode is Modbus/RTU protocol. It is recommended to use 22AWG multi-core shielded twisted pair cable or above to achieve the best results. The simple wiring instructions is below, please use the RS485 adapter include in the box (Please plug-in on the COM1 of the UNOcentral).
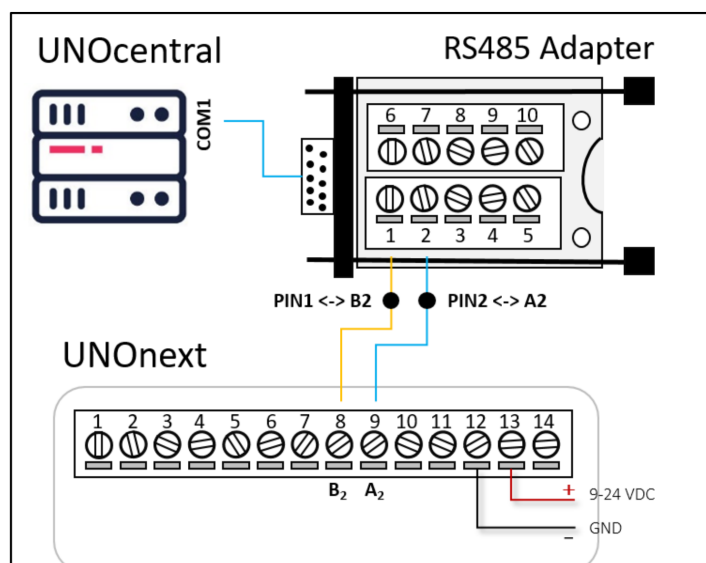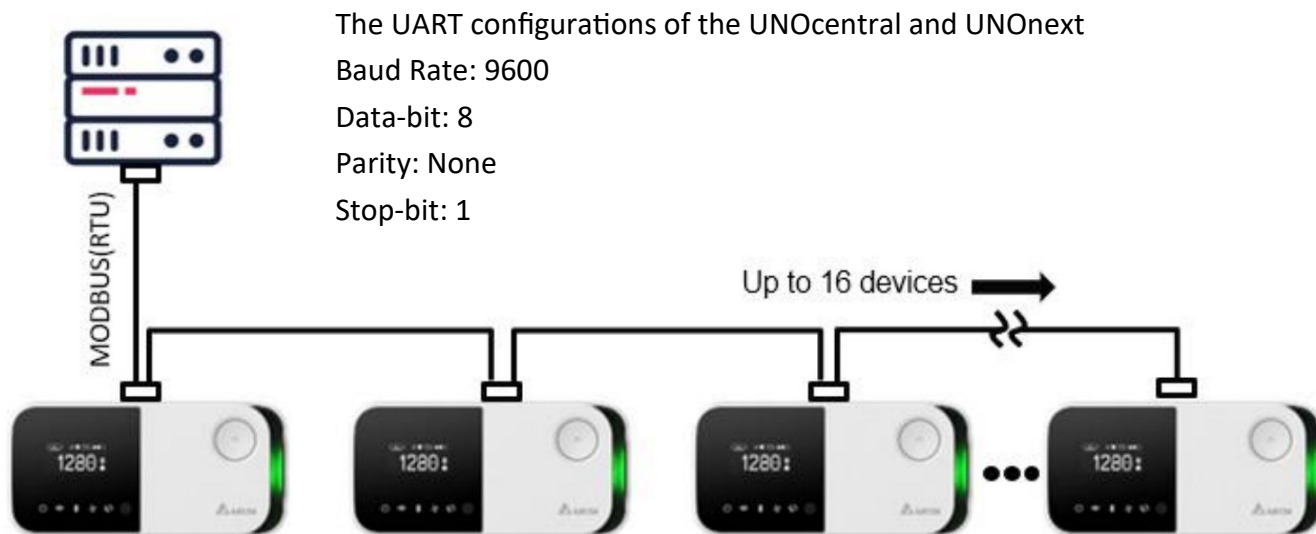

Figure 2   Wiring Instruction of UNOcentral and UNOnext

UNOnext can directly connect to a controller with RS485 interface, up to 16 devices can be connected to one controller.

The UART configurations of the UNOcentral and UNOnext
Baud Rate: 9600
Data-bit: 8
Parity: None
Stop-bit: 1

If the UART settings of UNOnext have been modified, please modify to the default settings above before connecting to UNOcentral.

The Modbus slave address of UNOnext can be set by dip switch following below table. Others detail UNOnext settings can be referred the UNOnext user manual. Table 2 Set Modbus slave address of UNOnext

Modbus slave address		Pin Number of DIP Switches			
Decimal	Hexadecimal	2	3	4	5
208	0xD0	↓	↓	↓	↓
209	0xD1	↓	↓	↓	↑
210	0xD2	↓	↓	↑	↓
211	0xD3	↓	↓	↑	↑
212	0xD4	↓	↑	↓	↓
213	0xD5	↓	↑	↓	↑
214	0xD6	↓	↑	↑	↓
215	0xD7	↓	↑	↑	↑
216	0xD8	↑	↓	↓	↓
217	0xD9	↑	↓	↓	↑
218	0xDA	↑	↓	↑	↓
219	0xDB	↑	↓	↑	↑
220	0xDC	↑	↑	↓	↓
221	0xDD	↑	↑	↓	↑
222	0xDE	↑	↑	↑	↓
223	0xDF	↑	↑	↑	↑

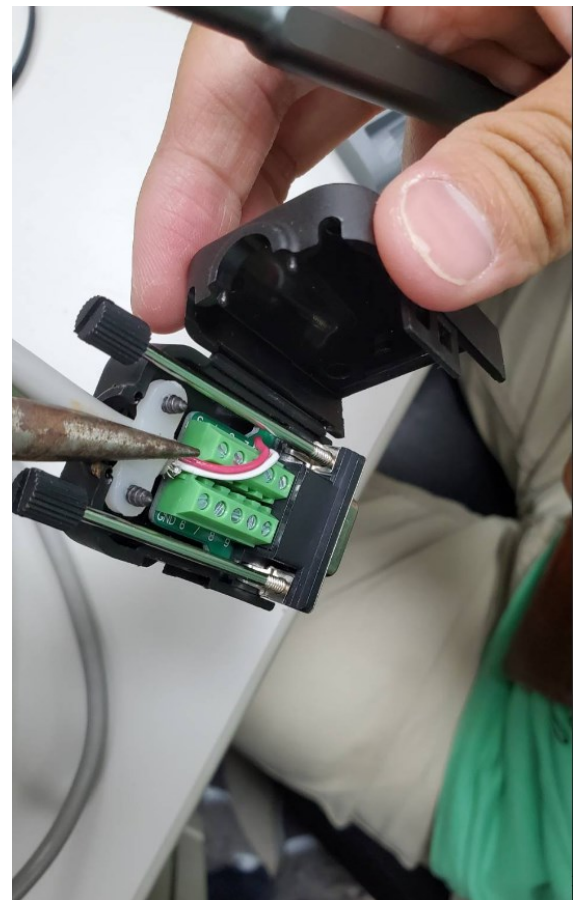Step of operation.
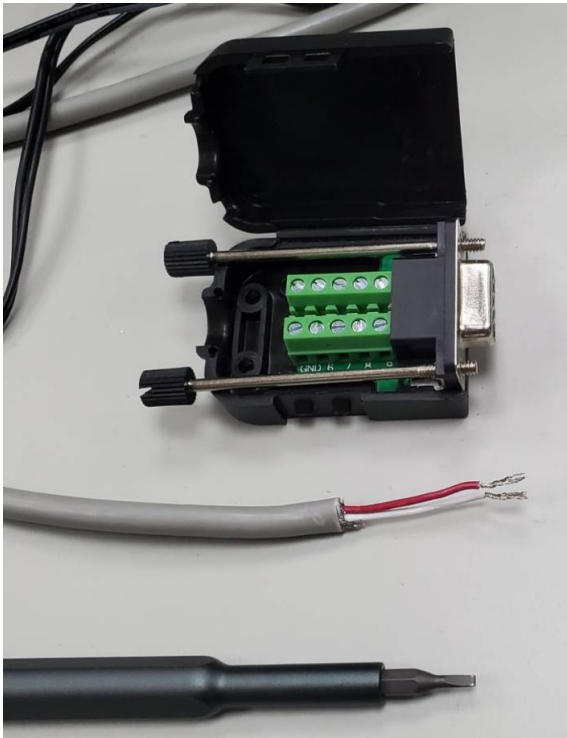
1. Prepare tools and connector.

2. Connect signal lines.

3. Tighten the screws

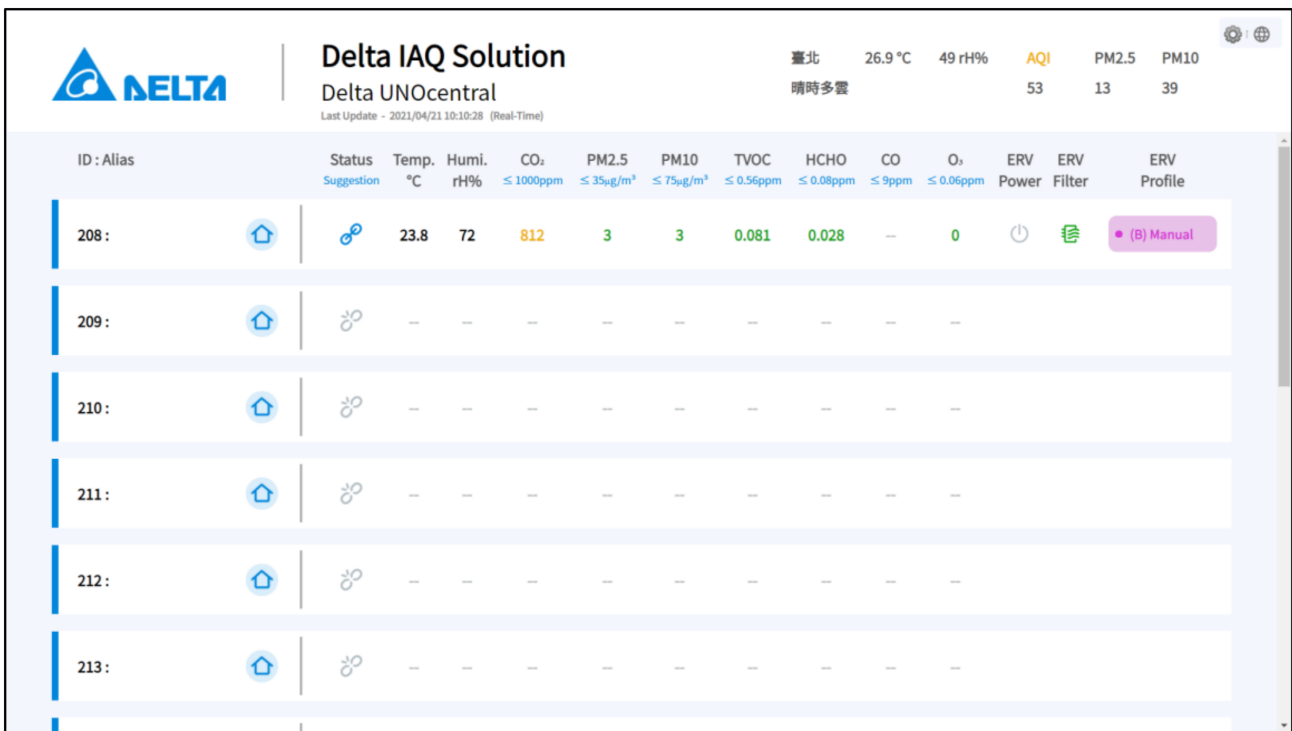4. Need to fix the plastic sheet.

5. Close the lid

6. Install connector on the COM1 of UNOcentral

7. Connect the HDMI cable, mouse, and keyboard to the screen to confirm that the number of UNOnext is the same as the number and sensor data are shown on the screen.

If the sensor data does not show value at all or the number of devices is incorrect, please check below checklists

◇ Are all UNOnext power on?

◇ Is RS485 wiring problem?

◇ Do use the wrong pin hole?

◇ Does follow RS485 installation guideline?

◇ All of UNOnext should be used different modbus slave address.