

UDS1100 Start Guide for AEC2.1

AIM-AEC21-CVT



BOSCH

en Quick Start Guide

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1 Introduction

This guide explains how to connect and configure the UDS1100 Lantronix converter with AEC2.1. When the UDS1100 converter's Ethernet network port is linked to AEC2.1 CPU LAN port, it provides an additional multi-drop communication channel, RS485 to interface up to four 4 reader board and four 8 input-output board. This document shows the connections to the AEC2.1's CPU and interface boards.

The UDS1100 converter support requires AEC2.1 firmware version 2.1.6.0 onwards. Please check our online AEC software upgrade at <http://www.boschsecurity.us/en-us/aec>.

What's in the box?

The AIM-AEC21-CVT box comes with the converter UDS1100, power supply, serial cable & CD ROM containing User guide and software utilities and Quick Start Guide from Lantronix. It also contains:

- Network cable - cross type
- A serial cable to connect to the RS485 port of AEC2.1's board
- A mounting plate with screws to mount UDS1100 on the panel
- A start guide

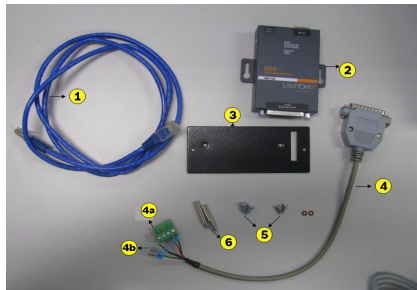


Figure 1.1 Components

No.	Description	No.	Description
1	Network cable	5	Screws
2	UDS1100	6	Metal standoffs
3	Metal plate		
4	Serial cable		
4a	Power terminal block		
4b	RS485 cable		

2 Installing UDS1100

The converter can be connected in two ways-either on a top of the reader board next to CPU (refer to Figure 2.6) or place the converter on another extension panel (refer to Figure 2.7).

For mounting the converter on the reader board follow the instructions below:

1. Install two metal standoffs on the reader board.

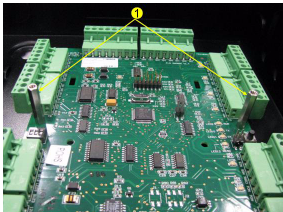


Figure 2.1 Reader board with metal standoffs

No	Description
1	Metal standoffs

2. Place and align the metal plate over the two metal standoffs. Place the machine screw and the flat plastic washer on the two allotted holes as shown in Figure 2.2.

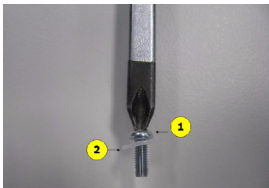


Figure 2.2 Machine screw with plastic washer

No	Description
1	Metal screw
2	Plastic washer



Figure 2.3 Mounting plate with the screw direction

Secure the metal plate by tightening the screws rotating in the direction shown by the arrow in Figure 2.3.

- Place and align the converter on the metal plate according to the slots. Place the machine screw on the two allotted holes as shown in Figure 2.4. Secure the converter by tightening the screws.



Figure 2.4 Converter mounted on plate with screw directions

- Connect the network cable and the serial cable(RS485) in the allotted slots as shown in Figure 2.5. The RS485 serial cable is connected to the AEC2.1's reader or I/O board. The network cable of the converter is connected to the LAN 2 port of the AEC2.1's CPU.



Figure 2.5 Network cable and serial cable connection points

No	Description
1	Network cable
2	Serial cable

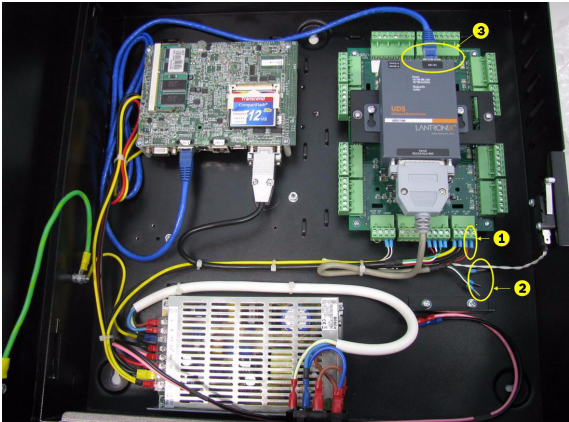


Figure 2.6 Wiring connections with converter next to AEC2.1 CPU

No	Description
1	Power terminal for serial cable
2	RS485 connection to another reader/input-output board
3	Network cable connection to LAN port 2

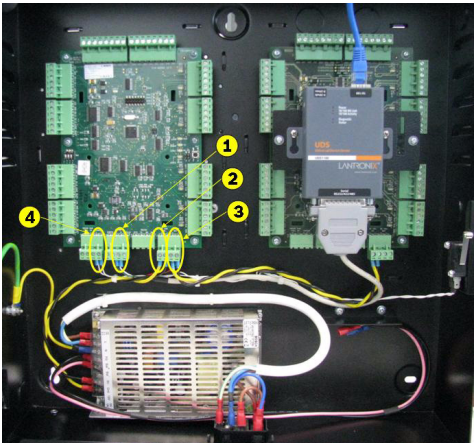


Figure 2.7 Alternative wiring connections of the converter

No	Description
1	A and B (RS485)
2	Main power
3	Out+ and Out-
4	Tamper switch

Figure 2.8 shows the detailed wiring illustrating the coloured wire points including the RS485 cable, main power and tamper switch.

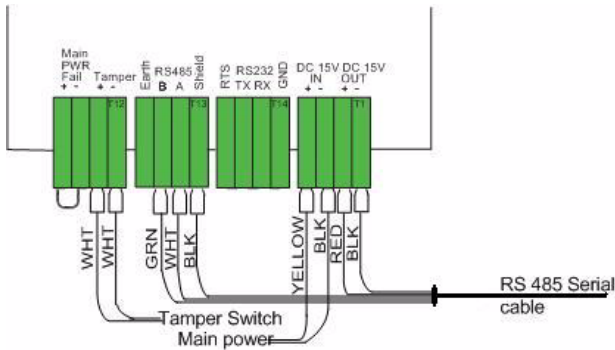


Figure 2.8 Detailed wiring(illustrating color wires and input points)

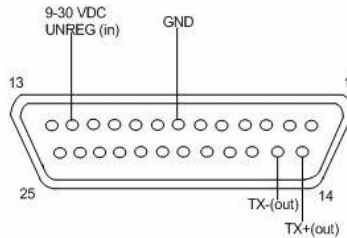


Figure 2.9 PINOUTS of RS485 serial cable

PIN	AEC's board	Colour wires
14(TX+)	RS485 A	White
15(TX-)	RS485 B	Green
12(VDC)	DC Out+	Red
7(GND)	DC Out-	Black

3 Setting up the converter

The Bosch pre-configured device, AIM-AEC2.1-CVT does not require any further configuration.

Do the following steps for advance setup:

1. If it is users defined/changing IP address to the converter follow steps 1 and 3.
2. If using original UDS1100 default setting from Lantronix, follow steps 1 to 3.

Step 1: The pre-configured IP address is 192.168.2.42 and the Subnet Mask is 255.255.255.0. Users can manually assign an IP address to the UDS1100, (refer to the Quick Start Guide from Lantronix).

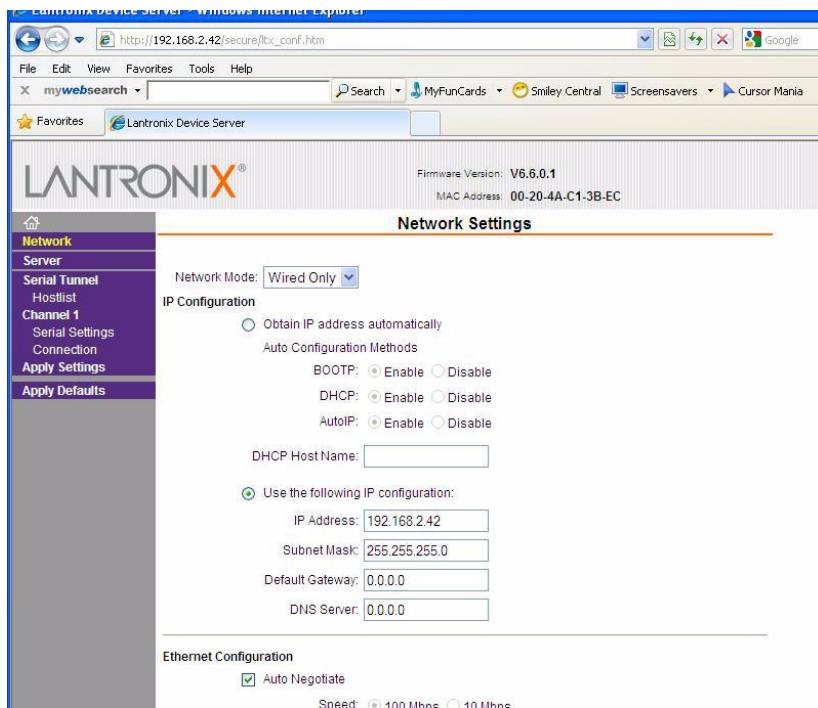


Figure 3.1 Network settings

Login the UDS1100 via a web browser as shown in Figure 3.1, to reassign the IP address. After changing the settings click on apply settings. If the UDS1100 for AEC2.1 is from Bosch, it comes with pre-configured network settings to RS485.

Step 2: Set the port settings and pack control in the serial settings page. Select RS485-2wire in the protocol drop down box. The Baud Rate is 19200, Data bits is 8 and Stop bits is 2. The value for Flow Control and Parity is set to none. The Idle Gap Time in the pack control is set to 12msec. Click on the apply settings.

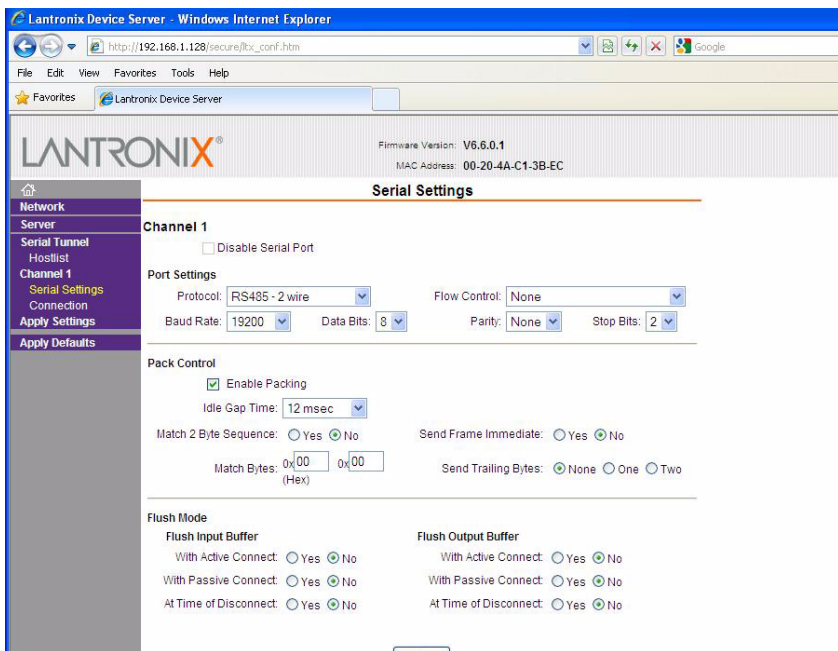


Figure 3.2 Serial settings

Step 3: Login to the AEC 2.1 and set up the LAN converter IP Address. Key in the IP address of the UDS1100 converter.

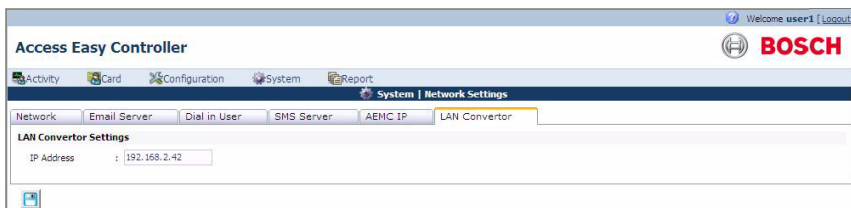


Figure 3.3 AEC2.1 LAN converter setting

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