enervent®

Freeway WEB Bus adapter

Installation and operating manual

Before installing and operating this unit,
please read this manual thorougly, and retain it for future reference.

Enervent Freeway WEB

TABLE OF CONTENTS

NOTE! The Freeway Ethernet Bus adapter only works with Enervent® ventilation units with EDA control system. The ventilation unit must be equipped with a mother board version 210 or newer.

PARTS LIST

THE FREEWAY ETHERNET DELIVERY INCLUDES:

1. Freeway Ethernet router with network cable
2. USB/RS-485 adapter between the router and the EDA mother board
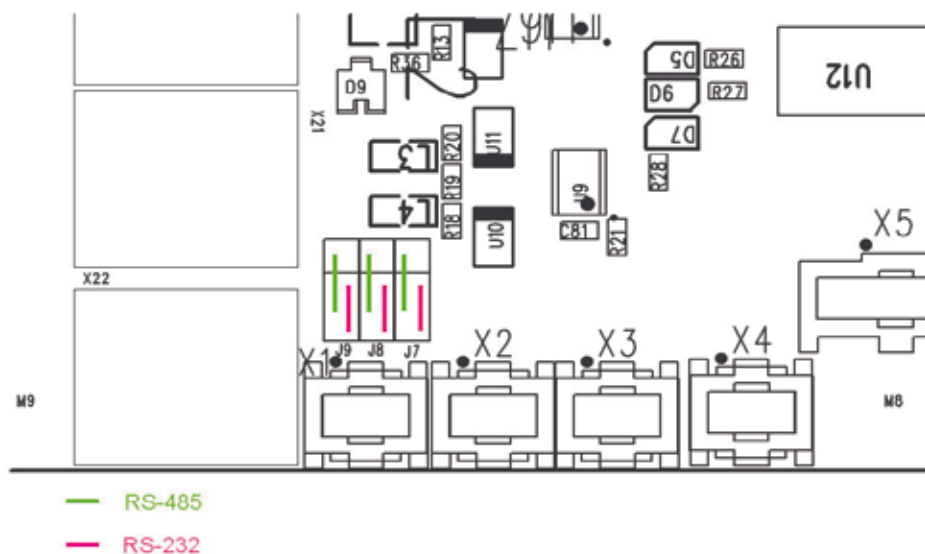3. Cable between the EDA mother board and the RS-485

The parts included in the ventilation unit delivery is listed in the ventilation unit manual.

INSTALLATION

PHASES OF INSTALLATION

1. Cut the power supply to the ventilation unit.
2. Open the ventilation unit electrical connection box so you have access to the EDA mother board.
3. Check that the short circuit jumper on the mother board corresponds to the communicaton mode you have chosen.

The communication mode for Freeway is chosen with the short circuit jumpers J7-J9 as shown in the picture.

—— RS-485
—— RS-232

4. Connect the cable between the EDA mother board and the USB/RS-485 adapter.
5. Connect the USB/RS-485 adapter to the USB gate on the Freeway.
6. Switch on the ventilation unit.
7. Switch on the Freeway router.
8. Connect one end of the network cable to the LAN 1 gate on the Freeway router and the other end to a computer.
9. Connect to Internet on the computer and go to the Freeway site 192.168.69.1. (Requirements for the Internet browser; Internet Explorer vers. 6 or newer / Mozilla FireFox vers. 2 or newer).
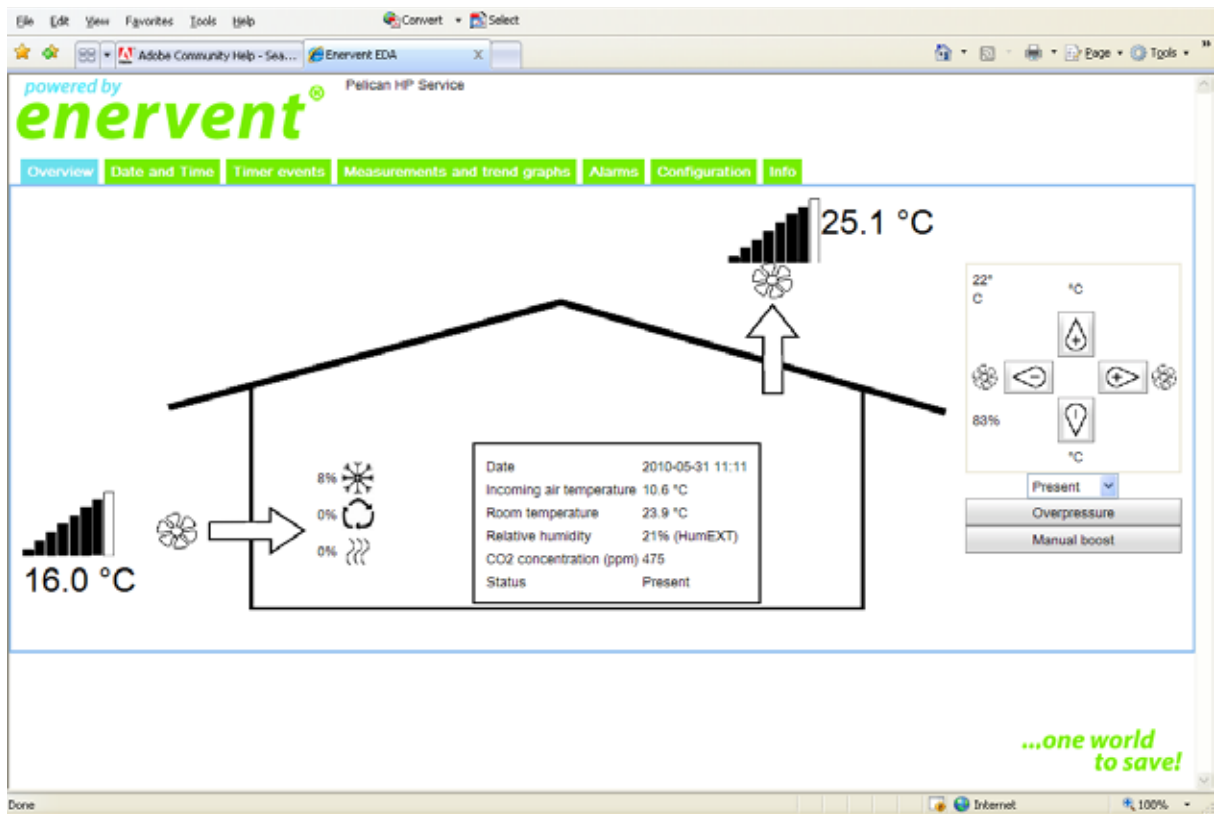
Enervent Freeway user interface

STARTING UP THE WIRELESS NETWORK (WLAN)

1.   Begin by choosing the *Configuration* tab on the Freeway user interface. Next choose *Wireless network configura-tion*, activate *Wireless access enabled* and feed the parameters:
       a)   SSID is the name used to identify the wireless network (default is EDA Freeway)
       b)   The Channel needs to be changed only if another wireless network uses the same channel
       c)   WPA-PSKey is the password for the wireless network. The passwork can is freely selectable, but required. The password must be at least eight (8) characters long.
2.   Select *Save* to start the wireless network. Freeway will restart and will be available after a few minutes. At that point the wireless network will also be available.
3.   Connect to the wireless network:
       Start an Internet browser and write the Freeway address 192.168.69.1 in the address field. The user interface for Freeway will appear in the browser.
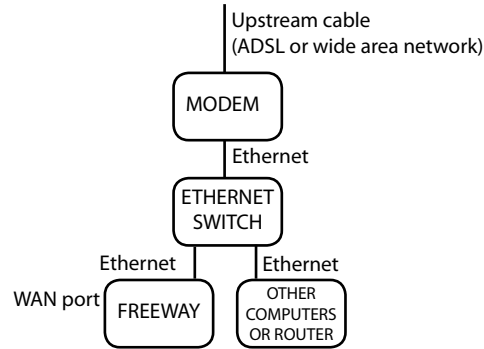
CONNECTING THE FREEWAY BUS ADAPTER TO INTERNET

The "WAN" gate on the Freeway adapter needs to be connected to a data transmission network in order for Freeway to be available on the Internet. The data transmission network must be in direct contact with Internet, i.e. it must have a publicly routable IP address. How to get a suitable IP address depends on the Internet connection in the building. A typical Finnish broadband connection gives a functioning IP address if Freeway is connected directly to the modem.

Freeway can be connected to the Internet in at least the following to ways:
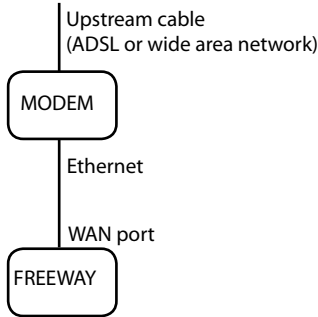
Picture 1: Direct connection to a broadband modem

Picture 2: Direct connection to a broadband modem, local network divided with switch

The Freeway Bus adapter can be contacted from the Internet if the network cable is connected directly to the modem. If Freeway is connected through a router of its own it can be reached by computers behind the same firewall.
Connection alternatives:

1.   Connect the Freeway WAN gate straight with the Ethernet gate on a ADSL/cable modem. In this case it is possible to connect portable computers to the Freeway LAN gates or connect to Internet using the Freeway wireless network (picture 1).
2.   The Ethernet cable from the cable modem/ADSL modem can be divided with a switch to run both to the home router and the Freeway Bus adapter. This works on the assumption that the broadband provider gives several IP addresses per modem (picture 2). The router is configrated to direct requests to HTTP gate TCP/80 and the Freeway bus adapter. Universal instructions for the configuration can not be given because they depend on the broadband connection and the model of router installed. The configuration requires expertise.

Choose tab *Configuration* on the user interface for Freeway. Click on *Network configuration for interface "WAN"*.
In the middle of the page is the heading *Current WAN setup*. The address can for instance be *inet addr: 192.168.1.5*. Addresses beginning with 192.168.x.x or 10.x.x.x indicate that Freeway is connected to the buildings own network and can be reached only on the internal network, not on the Internet. (Freeway can be reached over the Internet by configurating the router).
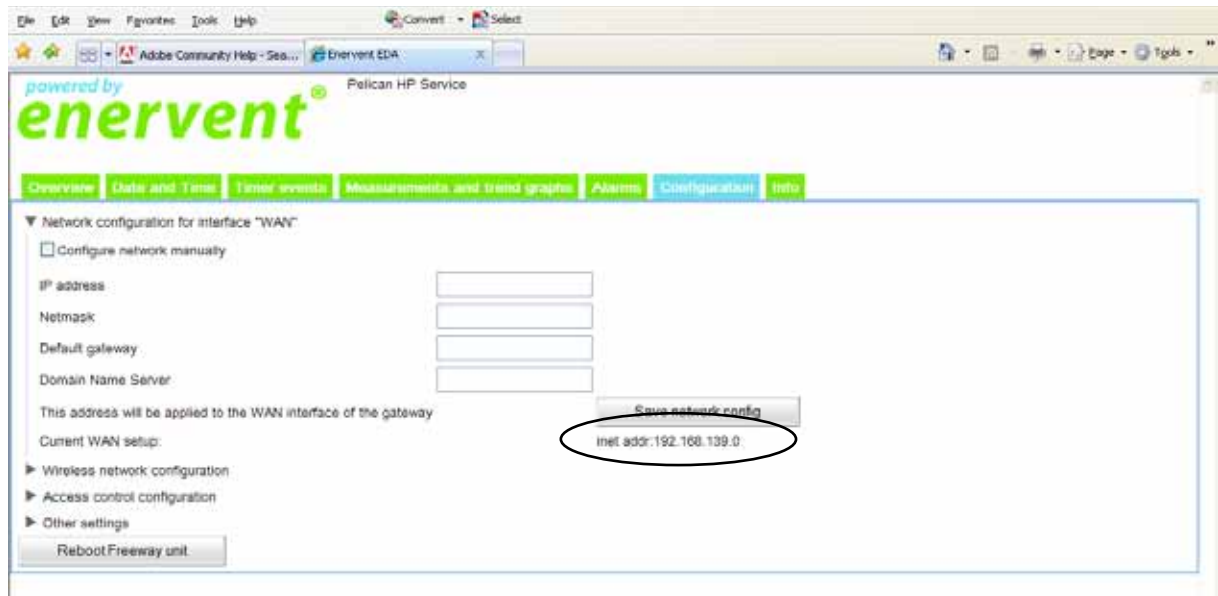
Start a www-browser. If Freeway has an public address that shows on the Internet, write it in the address field. Now The Freeway user interface appears in the browser.

SETTING THE PASSWORD FOR THE FREEWAY WEB PAGE

Open the *Configuration* tab and click *Access control configuration*. Write the desired password in the *New password* field. Confirm the password in the *Confirm new password* field. Take the new password into use by clicking *Set password*. After these actions the web page can only be entered by logging in. The Web browser asks for user name and password.
The username is "user" and the password is the one chosen earlier.
The password can be changed in the same way. The Freeway adapter needs to be reset if the password is forgotten. The resetting is done by pressing the long red button on the backside of the Freeway for 10 sec.

LINKING FREEWAY TO A MONITORING SYSTEM THROUGH MODBUS/TCP

The Enervent ventilation unit can be added as a part of a monitoring system using Modbus/TCP communication protocol. The Freeway adapter acts as a Modbus/TCP server and the data from the ventilation unit connected to the Freeway can be read of Slave id 1. To activate this function click on *Access control configuration* on the *Configuration* tab. Write the IP address of the system from which the Modbus/TCP client program sends the inquires in the *IP address of Modbus/TCP client* field. Click on *Save Modbus/TCP*. The function can be deactivated by emptying the field and clicking *Save Modbus/TCP*. After that the Freeway no longer takes orders from Modbus/TCP.

SETTING THE ALARM E-MAIL ADDRESS

The alarms from the Enervent ventilation unit can automatically be sent to an e-mail address. To activate the function click *Other settings* on the *Configuration* tab. Fill out the complete e-mail address for the alarm messages in the field *Recipient for alarm messages*. The address of the e-mail server (SMTP server) that can be used for sending the messages is written in the *SMTP server to be used for sending alarm messages* The network administrator or broadband provider can give this information.
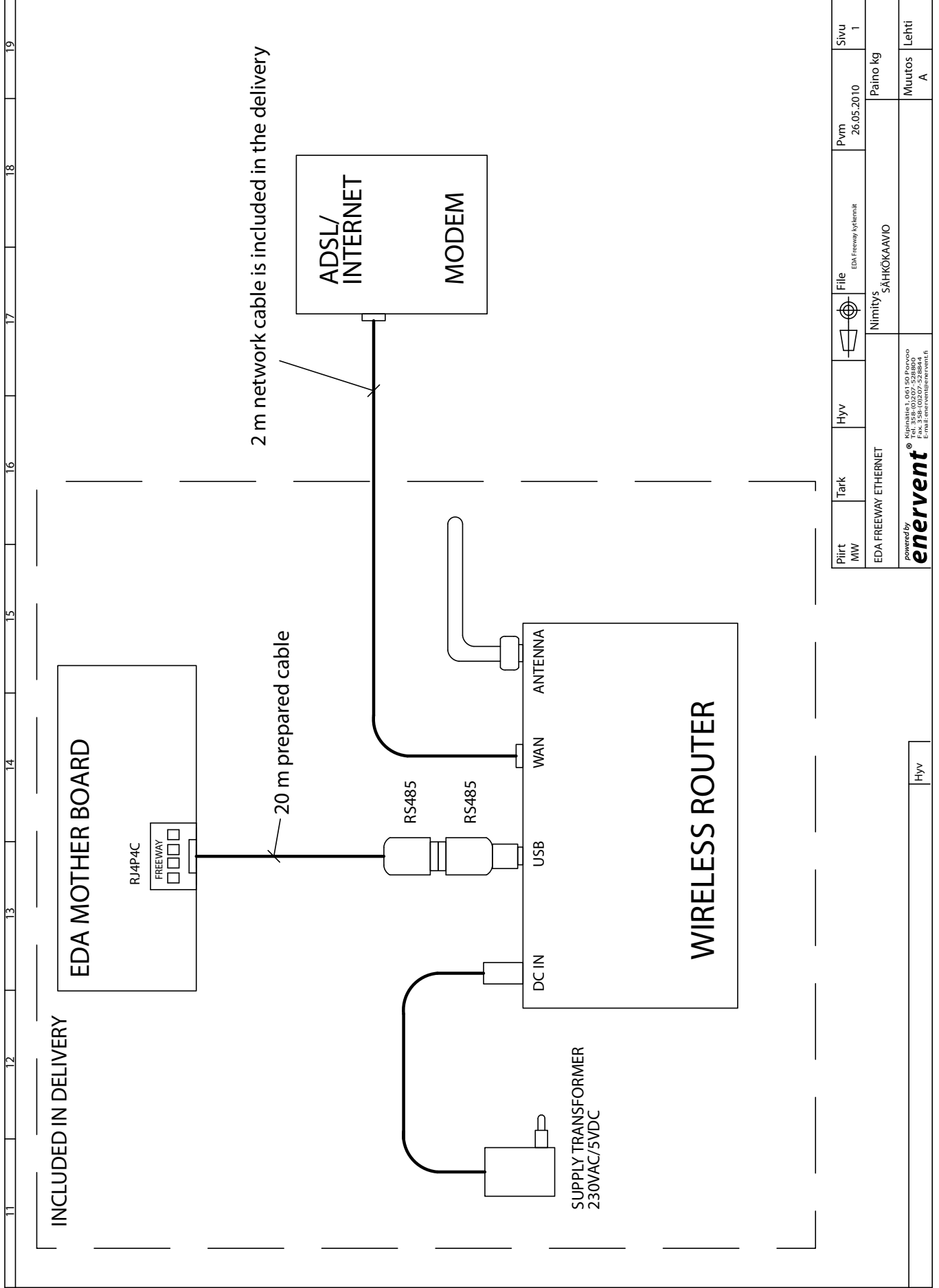
NAMING THE SYSTEM

The user interface can be equipped with a system identifier (Configuration -> Other settings -> System identifier), for instance a street address or whatever else character string. If activated the system identifier is shown in the top edge of the user interface besides the Enervent logo.

RESTORING THE FACTORY SETTINGS

The factory settings for the Freeway can be restored by pressing the small black pin on the back of the Freeway adapter for at least 30 seconds. When the pin is released Freeway starts up. The adapter will have returned to the factory settings. All the adjustments and updates made are lost. Resetting the Freeway does not affect the softare of ventilation unit connected to it.

INCLUDED IN DELIVERY

EDA MOTHER BOARD

RJ4P4C

FREEWAY

2 m network cable is included in the delivery

ADSL/
INTERNET

MODEM

20 m prepared cable

ANTENNA

WAN

RS485

RS485

USB

DC IN

WIRELESS ROUTER

SUPPLY TRANSFORMER
230VAC/5VDC

Plirt MW | Tark | Hyv | Pvm 26.05.2010 | Sivu 1
EDA FREEWAY ETHERNET | | | Paino kg
powered by **enervent** ® | Nimitys SÄHKÖKAAVIO | Muutos A | Lehti
Kipinätie1, 06150 Porvoo Tel.358-(0)207-528800 Fax.358-(0)207-528844 E-mail:enervent@enervent.fi | File EDA Freeway kytkennät

Hyv

8