

Integration Note

Manufacturer:	Daikin
Model Number(s):	VRV HVAC
g! Core Module Version:	8.8
Driver Developer:	Zoom Digital Home
Document Revision Date:	15 October 2024

Overview

This driver is to integrate Daikin HVAC system to Nice/Elan home automation.

It's works based on serial RS485 Modbus communication between Nice controller and Daikin DTA116A51 Modbus adapter below:



Supported Features

- **Scan Units:** automatically scan internal units connected to the HVAC system.
- **HVAC Mode:** On/Off and HVAC mode control for internal units.
- **Fan Speed Control:** Fan speed control and feedback for internal units.
- **Setpoint:** Setpoint control and feedback for internal units.
- **Room Temperature:** Feedback or room temperature of each internal unit.

Any feature not specifically noted as supported should be assumed to be unsupported.

Driver License

This driver works for a trial period. After that it requires a license key to function.

License keys can be obtained contacting us by drivers@zoomdigitalhome.com.br. License keys are issued on a per controller basis. You only need a single license key for multiple instances on the same controller.

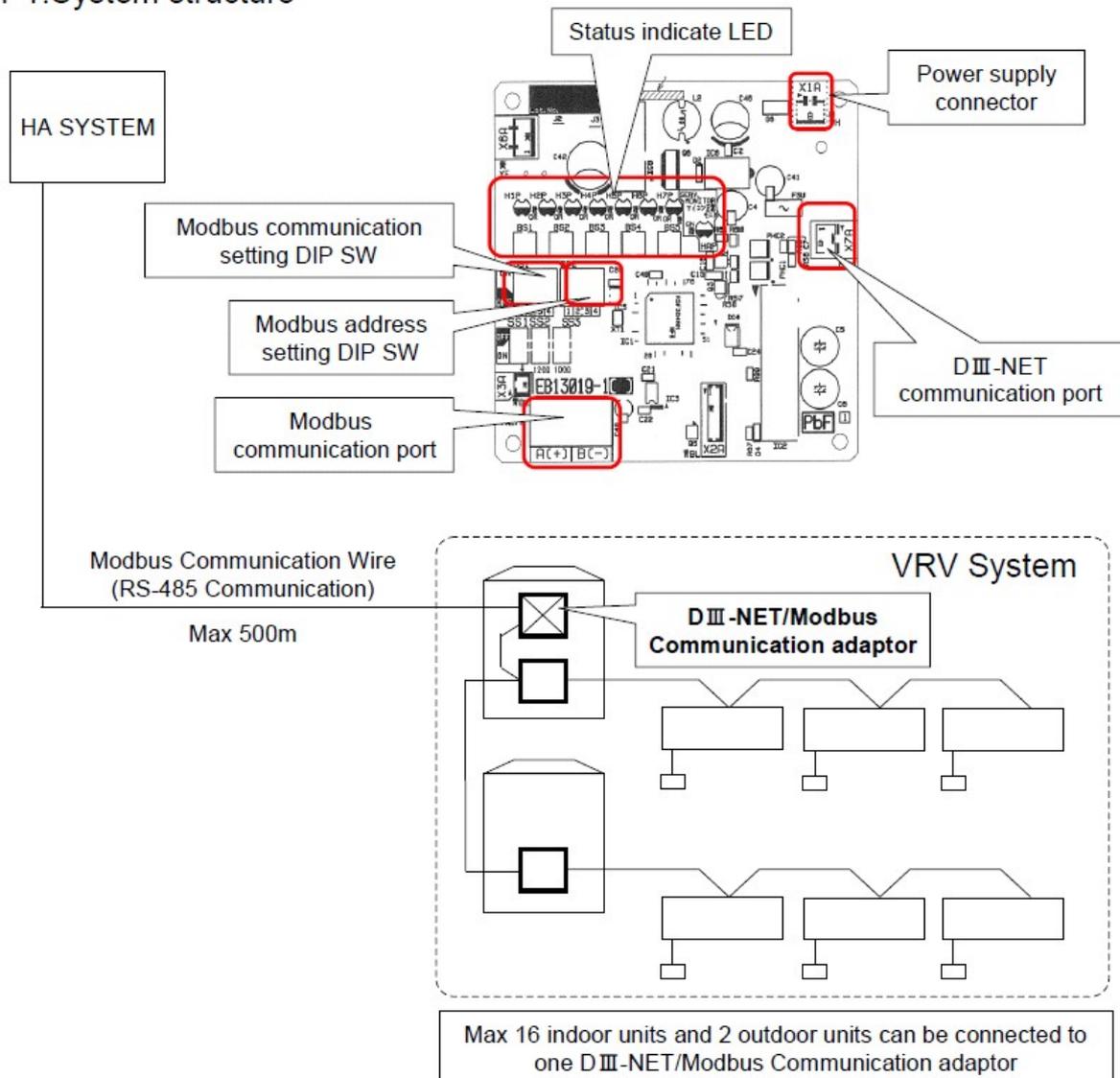
License price is US\$ 150.00

Dealer Support

Any help or support questions, please, contact us by drivers@zoomdigitalhome.com.br.

Device Setup

1-1. System structure



1. Set the DTA Modbus DIP SW as follow:

DS1 = 1:Off, 2:On, 3:Off, 4:Off (Speed: 19.200bps, Stop Bit: 1, Parity: Even)

DS2 = 1:Off, 2:Off, 3:Off, 4:On (To set adaptor address to 1)

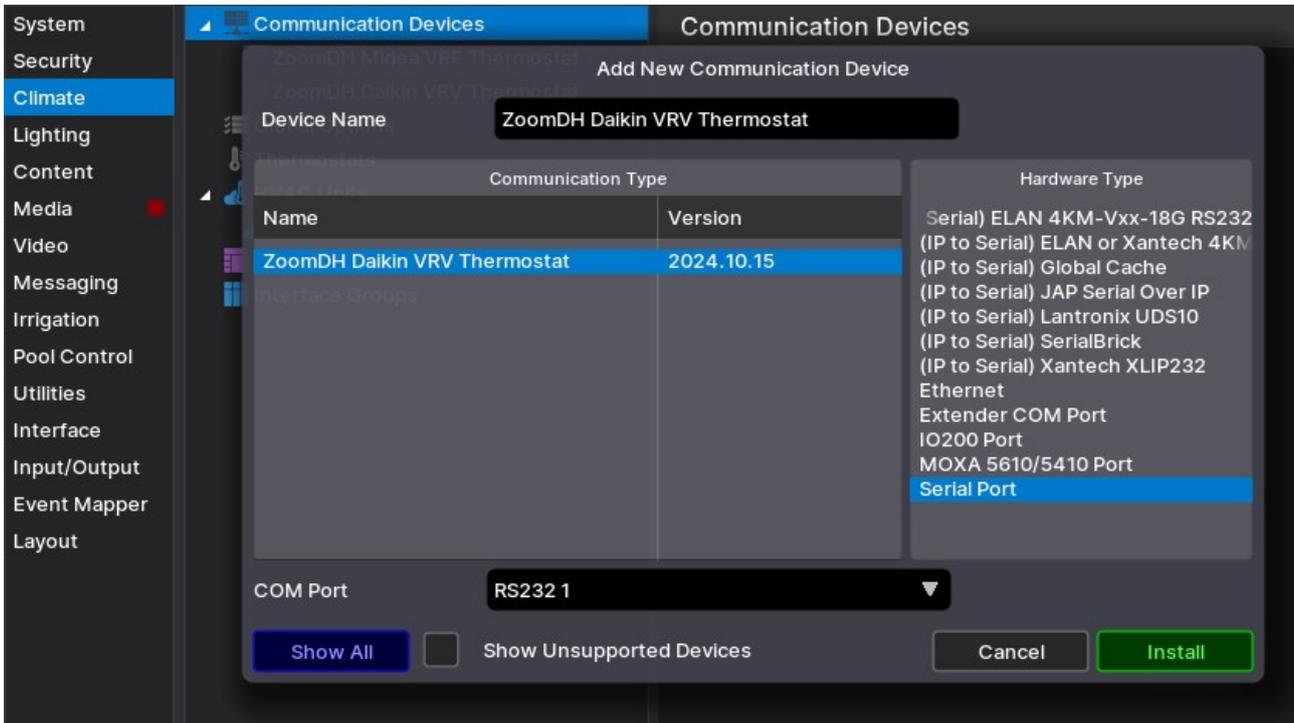
2. Connect the DTA Modbus port to Elan Controller RS485 port with proper serial RS485 cable.

If your Elan controller doesn't has a RS485 port, use a RS485/RS232 converter to connect to the RS232 port.

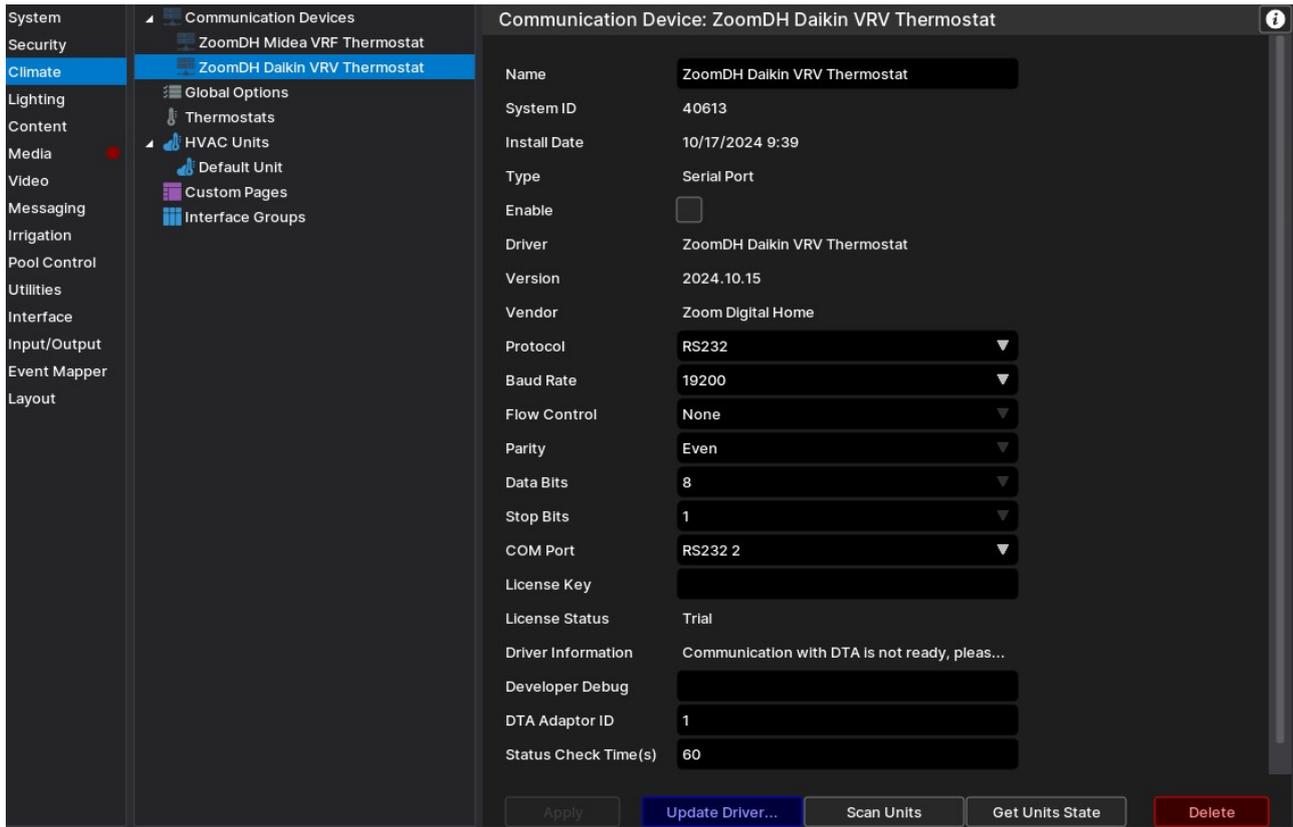
Pay attention to the Modbus/RS485 connection, A(+) / B(-) terminals must be connected to the same position A/B on the Elan controller. NOT invert polarity.

Installation Process

1. Please check the latest driver version on www.zoomdigitalhome.com.br/drivers
2. Under the Climate tab in configurator, right click on Communication Devices and click Add New Communication Device.



3. Click "Import" button and select the Daikin driver that you saved on step 1.
4. In Communication Type select the "ZoomDH Daikin VRV Thermostat".
5. In Hardware Type select "Serial Port".
6. In COM Port select the serial port where the DTA it's connected to.
7. Click Install.



Driver configuration:

1. On driver properties, check the serial communication parameters:
 - a. Baud Rate: **19200**
 - b. Flow Control: **None**
 - c. Parity: **Even**
 - d. Data Bits: **1**
2. DTA Adaptor ID: inform the ID configured on DTA board dip switches.
3. Status Check Time(s): set the interval in seconds that the driver will query units status from DTA. (default: 60s)
4. Once all the settings are done, click on “Scan Units” and the driver will query the units connected to the DTA and automatically add them to the project.

Common Mistakes

1. Incorrect serial RS232/RS485 connection.
2. Wrong serial parameters settings on DTA board and/or driver properties.
3. Wrong DTA ID settings.

Changelog

2024.10.15 – Initial revision.

ELAN Developer Partner Information

This ELAN driver was written and supported by:



www.zoomdigitalhome.com.br
drivers@zoomdigitalhome.com.br