

LG THERMA V (R32) QUICK START GUIDE - V02

Planet Devices Ltd

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VERSION HISTORY

| Version | Date | Author | Notes |
|---------|------------|--------|--|
| V01 | 2023-09-22 | JD | Initial release |
| V02 | 2024-02-20 | JD | <ul style="list-style-type: none"> • Rename to Atmo • Add operating hours time zone • Add Modbus Worker Address configuration • Update Atmo part number • Add BUS1/BUS2 mapping |

PREFACE

Atmo (RS-485 Modbus RTU) [P/N 386363-249] requires a Modbus interface in order to communicate with heat pump systems.

For LG Electronics THERMA V systems, this is provided over the CN_COM (Series 3) or CN_MODBUS (Series 4) socket, located on the indoor unit PCB.

PURPOSE OF THIS DOCUMENT

Modbus interfaces must be configured to match the serial settings of the Atmo device, or vice versa.

This document serves as a “quick start” guide only. Please refer to the documentation provided with the heat pump system for more information.

INSTALLATION INSTRUCTIONS

1. Remove all power from the heat pump system
2. On the indoor unit PCB, set the DIP switches according to the following table:

| SW1-1 | | SW1-2 | |
|-------|---|-------|---|
| ON | ↑ | OFF | ↓ |

See *Appendix A – DIP Switch Setting Summary* for a summary of the changes made by these DIP switches.

3. Connect the RS-485 A and B signal lines according to the following table:

| | Series 3 | Series 4 |
|-----------|----------|----------|
| BUS1 (A) | 27 | 26 |
| BUS 2 (B) | 28 | 27 |

4. Turn on the heat pump system
5. On the remote controller, navigate to Main screen → menu → setting → service → RMC version information → SW Version
6. Take a note of the SW version
e.g. 1.00.1
7. Navigate to Main screen → menu → Setting
8. Press and hold the ^ (up) button for three seconds
9. Enter the Installer Mode password
The default password is the same as the SW version, e.g. 1001.
10. Navigate to Modbus Address
11. Press OK
12. Ensure that Address Code (Hex) reads 01

If you wish to use a different Modbus Worker address, this change must be reflected in Sphere → Manage Devices → Address. Failure to update the Address will result in an **ERROR** state, where the Atmo device is unable to monitor or control the THERMA V system.

Please be aware that the controller uses hexadecimal notation, whilst Sphere uses decimal. Before entering the Address into Sphere, hexadecimal must be translated to decimal using a calculator: e.g. 21 (HEX) = 33 (DEC).

Please consult the *How to enter installer setting* (pg. 136) and *Modbus Address* (pg. 249) pages of the LG THERMA V installation manual for supplementary information.

The Atmo device should now be able to communicate with the THERMA V system. Please refer to the Atmo Installation Manual for further steps.

TECHNICAL SUPPORT

If you are unable to use your Atmo device as intended after following the steps in this manual - and the Atmo Installation Manual - please contact our Support team.

Planet Devices operate Monday to Friday, between the hours of 09:00 and 17:30 (UTC/GMT/BST):

| | |
|------------------|--|
| Email Address | support@planetdevices.com |
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APPENDIX A - DIP SWITCH SETTING SUMMARY

- SW1-1 ON instructs the Indoor Unit to act as a Modbus Worker
- SW1-2 OFF is the default value for Common 3rd Party (Series 3) or Unified Open Protocol (Series 4)