

| Manufacturer: | Coolmaster | | |
|------------------------------|---|--|--|
| Model Number(s): | 1000D, 2000S, 3000T 4000M, 7000F, 8000I, 9000H, NET, CoolLinkHUB | | |
| Minimum Core Module Version: | 8.4 | | |
| Document Revision Date: | 12/30/2019 | | |

OVERVIEW AND SUPPORTED FEATURES

This driver allows a g! system to communicate with a Coolmaster climate system via RS-232 or Ethernet.

COOLMASTER CLIMATE SYSTEMS SUPPORT THE FOLLOWING FEATURES:

Any feature not specifically noted as "supported" is not supported.

Temperature Control: Temperature control can be managed by the viewer. Temperature can be shown as either Fahrenheit or Celsius on the viewer interface, and show one decimal place or whole numbers only.

Schedule Control: Multiple schedules can be set using the Viewer software.

Mode Control: Depending on the Coolmaster interface being used, the modes Cool, Dry, Heat, Auto, Fan and Off may be supported.

Fan Control: Depending on the Coolmaster interface being used, Fan modes of Low, medium, High, Top and Auto may be supported.

Device Discovery: Discovery of connected devices.

History View: The history view shows the inside temperature, outside temperature, unit run times, and the current set point.

COOLMASTER MODEL MODE SUPPORT:

| Model | Supported Climate Modes | Supported Fan Speed Modes |
|-------------|---------------------------------|------------------------------|
| 1000D | Off, Cool, Heat, Dry, Fan, Auto | Low, Medium, High |
| 2000S | Off, Cool, Heat, Dry, Fan | Low, Medium, High, Auto |
| 3000T | Off, Cool, Heat, Dry, Fan | Low, Medium, High, Auto |
| 4000M | Off, Cool, Heat, Dry, Fan | Low, Medium, High, Auto, Top |
| 7000F | Off, Cool, Heat, Dry, Fan | Low, Medium, High, Auto |
| 80001 | Off, Cool, Heat, Dry, Fan | Low, Medium, High, Top |
| 9000H | Off, Cool, Heat, Dry, Fan | Low, Medium, High |
| NET | Off, Cool, Heat, Dry, Fan, Auto | Low, Medium, High, Auto |
| CoolLinkHUB | Off, Cool, Heat, Dry, Fan, Auto | Low, Medium, High, Auto, Top |

CONNECTION DIAGRAM: RS-232 CONTROL

Refer to the Bill of Materials and Wiring Diagram that follow:



BILL OF MATERIALS

| | Device | Manufacturer | Part Number | Protocol | Connector Type | Notes |
|---|------------------------|--------------|----------------------|----------|--------------------------|---------------------------------|
| 1 | RS-232 Interface | Coolmaster | Various (e.g. 1000D) | RS-232 | DB-9 Female | |
| 2 | DB-9M to RJ-45 Adapter | ELAN | HA-CB-307 | RS-232 | DB-9 Male X RJ-45 Female | |
| 3 | Cat5 Cable Assy. | Installer | N/A | RS-232 | RJ-45 Male X RJ-45 Male | Must terminate all 8 conductors |
| 4 | g! Controller | ELAN | Various (e.g. HC12) | RS-232 | RJ-45 Female | |

CONNECTION DIAGRAM: ETHERNET CONTROL

Refer to the Bill of Materials and Wiring Diagram that follow:



BILL OF MATERIALS

| | Device | Manufacturer | Part Number | Protocol | Connector Type | Notes |
|---|------------------|--------------|---------------------|----------|-------------------------|-------|
| 1 | IP Interface | Coolmaster | CoolmasterNet | Ethernet | RJ-45 Female | |
| 2 | Cat5 Cable Assy. | N/A | N/A | Ethernet | RJ-45 Male X RJ-45 Male | |
| 3 | Network Assembly | Elan | NWA18 | Ethernet | RJ-45 Female | |
| 4 | g! Controller | ELAN | Various (e.g. SC10) | Ethernet | RJ-45 Female | |

CONFIGURATION OVERVIEW

The Coolmaster climate system must first be installed and configured by a suitable qualified and experienced installer. Further information about Coolmaster installation can be found here: <u>http://www.coolautomation.com/</u>.

The CoolmasterNet and CoolLinkHUB Ethernet-controlled devices can be configured to support multiple "lines" of thermostats. This is NOT supported in the driver. All thermostats must be installed on the same line, and the line number ("L1" – "L6"), must be defined in the driver's properties.

Groups

Coolmaster systems use groups to allow several thermostats to be controlled together.

If grouping is not supported by your device (e.g. CoolLinkHUB), then the **Settings** field of each discovered thermostat in configurator should be ignored (and will say **No Group**).

If your device supports groups, and you have groups already defined in Coolmaster, these will be automatically detected in the thermostat **Settings** field when you discover thermostats in **g!**. If you have no groups setup already, you can choose to assign a thermostat as a Group Master or Slave in the **Settings** field. If a thermostat is assigned as a Group Master, all Group Slave thermostats will mirror any configuration changes made to the Group Master. You can then choose to display only the Group Master thermostat in the user interface.

Disable/Enable Auto Mode

If a thermostat doesn't support auto mode, the auto mode option can be hidden in the user interface of the thermostat by disabling the **Auto Mode** setting on the thermostat in configurator.

<u>G!</u> CONFIGURATION DETAILS

"<Auto Detect>", etc.

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The following table provides settings used in the **g!** Configurator. Please refer to the Configurator Reference Guide for more details.

- "<Select from list>" Select the appropriate item from the list (or drop-down) in the Configurator.
- "<User Defined>", etc. Type in the desired name for the item.
 - The system will auto detect this variable.

Refer to the **g! System Programming Details** below for additional information.

| Devices | Variable Name | Settings (Serial) | Settings (Ethernet) |
|-----------------------|-------------------------------------|---|---|
| Communication Devices | Name | <user defined=""> (Default: Cool Master RS232)</user> | <user defined=""> (Default: Cool Master IP)</user> |
| | System # | <auto detect=""></auto> | <auto detect=""></auto> |
| | Device Type | Serial Port / Cool Master RS232 | Ethernet / Cool Master IP |
| | Enable Sharing | <select from="" list=""></select> | <select from="" list=""></select> |
| | COM Port | <select from="" list=""></select> | *Not Applicable* |
| | Protocol | <auto detect=""></auto> | *Not Applicable* |
| | Baud Rate | <auto detect=""></auto> | *Not Applicable* |
| | Flow Control | <auto detect=""></auto> | *Not Applicable* |
| | Parity | <auto detect=""></auto> | *Not Applicable* |
| | Data Bits | <auto detect=""></auto> | *Not Applicable* |
| | Stop Bits | <auto detect=""></auto> | *Not Applicable* |
| | Server(s) | *Not Applicable* | <select from="" list=""></select> |
| | IP Address | *Not Applicable* | <user defined=""> (Enter the IP address of the CoolmasterNet uni</user> |
| | Port | *Not Applicable* | <user defined=""> (Default: 10102)</user> |
| | | | |
| Thermostats | Name | <user defined=""> (Default: <auto detect="">)</auto></user> | <user defined=""> (Default: <auto detect="">)</auto></user> |
| | System # | <auto detect=""></auto> | <auto detect=""></auto> |
| | Driver Version | <auto detect=""></auto> | <auto detect=""></auto> |
| | Driver Vendor | <auto detect=""></auto> | <auto detect=""></auto> |
| | Device Type | Cool Master Thermostat | Cool Master Thermostat |
| | Communication Device | <select from="" list=""> (Choose Serial Communcation Device)</select> | <select from="" list=""> (Choose Ethernet Communcation Device)</select> |
| | Thermostat ID | <auto detect=""></auto> | <auto detect=""></auto> |
| | Settings | <select from="" list=""></select> | <select from="" list=""></select> |
| | Heating Unit | <select from="" list=""></select> | <select from="" list=""></select> |
| | Cooling Unit | <select from="" list=""></select> | <select from="" list=""></select> |
| | Show Usage in History | <select from="" list=""></select> | <select from="" list=""></select> |
| | | | |
| | | | |
| Schedules | Number of Schedules | <select from="" list=""></select> | <select from="" list=""></select> |
| | Select House Modes for Schedules | <select from="" list=""></select> | <select from="" list=""></select> |
| | Periods per Day | <select from="" list=""></select> | <select from="" list=""></select> |
| | Number of Weekly Programs | <select from="" list=""></select> | <select from="" list=""></select> |
| | Select Days for each Weekly Program | <select from="" list=""></select> | <select from="" list=""></select> |
| | | | |
| Global Options | Units | <select from="" list=""></select> | <select from="" list=""></select> |
| Giobal Options | Temporary Hold Mode | <select from="" list=""></select> | <select from="" list=""></select> |
| | Temporary Hold Default Time | <select from="" list=""></select> | <select from="" list=""></select> |
| | Outside Temperature Sensor | <select from="" list=""></select> | <select from="" list=""></select> |
| | Outside Temperature Sensor | <select from="" list=""></select> | <pre><select from="" list=""> </select></pre> |
| | Outside Humidity Sensor | Selection lists | Select norm list? |

COMMON MISTAKES

- Not entering the correct IP address and port number into the driver properties.
- Not selecting the correct COM port in the driver properties.
- Not selecting the correct "line" number in the driver properties.