

## D3000M Series Command Set

The DGH D3000M series products use a simple command and response protocol. A module must be interrogated by a host computer to obtain data. A module will never initiate a command sequence in order to prevent communications collisions.

A command is initiated with a command prompt, may be a dollar sign (\$) or pound sign (#). Following the prompt a single address character must be transmitted. Each module on a communications bus must be setup with a unique address. The address is followed by a two character command. Every command is terminated with a carriage return.

The module response begins with a response prompt, which is an asterisk (\*) followed by the necessary data. Every response is terminated with a carriage return. Linefeeds after the carriage return are user selectable. See the table below for typical commands and their respective response messages.

| D3000/4000 Command Definition      | Typical Command | Typical Response |
|------------------------------------|-----------------|------------------|
| <b>ACK</b> - Acknowledge           | \$1ACK          | *                |
| <b>AO</b> - Analog Output          | \$1AO+00020.00  | *                |
| <b>DI</b> - Digital Input          | \$1DI           | *0007            |
| <b>HX</b> - Hex Output             | \$1HX0FFF       | *                |
| <b>RAO</b> - Read Analog Output    | \$1RAO          | *+00001.07       |
| <b>RHI</b> - Read HI Limit         | \$1RHI          | *+00032.00       |
| <b>RID</b> - Read Identification   | \$1RID          | * Boiler         |
| <b>RLO</b> - Read LO Limit         | \$1RLO          | *+00004.00       |
| <b>RMA</b> - Read Modbus Address   | \$1RMA          | *0104            |
| <b>RMS</b> - Read Manual Slope     | \$1RMS          | *+00004.00       |
| <b>RMN</b> - Read Minimum          | \$1RMN          | *+00004.00       |
| <b>RMX</b> - Read Maximum          | \$1RMX          | *+00020.00       |
| <b>RS</b> - Read Setup             | \$1RS           | *31070140        |
| <b>RSL</b> - Read Slope            | \$1RSL          | *+00001.00       |
| <b>RSU</b> - Read Setup            | \$1RSU          | *31070140        |
| <b>RWT</b> - Read Watchdog Timer   | \$1RWT          | *+00010.00       |
| <b>WE</b> - Write Enable           | \$1WE           | *                |
| <b>Write Protected Commands</b>    |                 |                  |
| <b>HI</b> - HI Limit               | \$1HI+00015.00  | *                |
| <b>ID</b> - Identification         | \$1ID BOILER    | *                |
| <b>LO</b> - LO Limit               | \$1LO+00004.00  | *                |
| <b>MBD</b> - Modbus Disable        | \$1MBD          | *                |
| <b>MBR</b> - Modbus Enable         | \$1MBR04        | *                |
| <b>RR</b> - Remote Reset           | \$1RR           | *                |
| <b>SU</b> - Setup                  | \$1SU31070140   | *                |
| <b>TMN</b> - Trim Minimum          | \$1TMN+00000.95 | *                |
| <b>TMX</b> - Trim Maximum          | \$1TMX+00100.00 | *                |
| <b>WT</b> - Set Watchdog Timer     | \$1WT+00005.00  | *                |
| <b>WSL</b> - Write Slope to EEPROM | \$1WSL+00100.00 | *                |