VEMER VE794100 OT1

VEMER VE794100 OT1 OpenTherm Modulating Weekly Room Thermostat

User Manual

1. Product Overview

The VEMER OT1 thermostat is designed for use exclusively with boilers operating on the standard OpenTherm protocol. This protocol, established in 1996, facilitates communication between OpenTherm thermostats and compatible boilers. The OT1 chronothermostat provides modulating control, communicating with the boiler via a standard OpenTherm bus. This functionality contributes to energy savings in daily heating use.

Its efficiency can lead to an estimated 4% energy saving on utility bills. Classified as Class V, it is compatible with certain energy efficiency incentives.

Image 1.1: Front view of the VEMER OT1 thermostat. The display shows "DAY 1", "12:06", and "21.7°C". Control buttons are visible on both sides.

2. Key Features

- Weekly modulating chronothermostat with OpenTherm standard.
- Three operating modes: Summer, Winter, Off.
- Three temperature management modes: Auto, Comfort, Economy.
- Automatic weekly programming capability.
- Adjustable timer from 10 minutes to 45 days.
- Large LCD screen for displaying measured temperature and programmed settings.
- Control buttons located on the sides of the screen for easy access.
- Terminal block at the rear for boiler connection.

Image 2.1: OpenTherm protocol compatibility and Class V energy efficiency rating.

3. Setup and Installation

Installation of the VEMER OT1 thermostat is designed to be straightforward, typically requiring a two-wire connection to a compatible OpenTherm boiler.

3.1 Mounting

The thermostat should be mounted on a flat wall surface, away from direct sunlight, drafts, or heat sources that could affect temperature readings. Ensure the mounting location allows for easy access to the control buttons and clear visibility of the LCD screen.

Image 3.1: Rear mounting plate of the VEMER OT1 thermostat, indicating screw points and wiring access.

3.2 Wiring

Connect the thermostat to your OpenTherm compatible boiler using a two-wire connection. The terminal block for this connection is located at the rear of the instrument. Refer to your boiler's manual for specific OpenTherm connection terminals.

- **Power Supply:** The thermostat is powered via the OpenTherm communication bus. No separate power supply is typically required.
- **Connection:** Ensure correct polarity if specified by your boiler manufacturer, although OpenTherm typically does not require strict polarity.
- **Safety:** Always disconnect power to the boiler before performing any wiring. If you are unsure, consult a qualified electrician or HVAC technician.

Image 3.2: Basic wiring diagram for connecting the OT1 thermostat to an OpenTherm boiler.

4. Operating Instructions

The VEMER OT1 thermostat features a large LCD screen and control buttons on its sides for intuitive operation.

Image 4.1: Side view of the OT1 thermostat, showing the control buttons.

4.1 Basic Controls

- **Up/Down Arrows:** Adjust temperature settings or navigate menu options.

- **PROG Button:** Access programming modes for weekly schedules.
- **Mode Button (House/Sun/Moon icon):** Switch between temperature management modes (Auto, Comfort, Economy).
- **AUTO/Clock Button:** Select automatic operation or set the timer.
- **Power/OK Button:** Turn the unit on/off or confirm selections.

4.2 Operating Modes

The thermostat offers three primary operating modes:

- **Summer Mode:** Typically used for cooling (if applicable to your system) or to disable heating.
- **Winter Mode:** Activates heating based on programmed schedules or manual settings.
- **Off Mode:** Disables all heating and cooling functions.

4.3 Temperature Management Modes

Within Winter or Summer mode, you can select from three temperature management strategies:

- **Auto Mode:** Follows the programmed weekly schedule.
- **Comfort Mode:** Maintains a higher, user-defined comfort temperature.
- **Economy Mode:** Maintains a lower, user-defined economy temperature, ideal for energy saving when the space is unoccupied or during sleep.

4.4 Weekly Programming

To set up a weekly heating schedule:

1. Press the **PROG** button to enter programming mode.
2. Use the Up/Down arrows to select the day of the week or a block of days.
3. Adjust the desired temperature for specific time intervals using the Up/Down arrows.
4. Confirm each setting with the **OK** button.
5. Repeat for all desired time slots and days.
6. Exit programming mode by pressing **PROG** again or waiting for a timeout.

The display will show a graphical representation of the programmed temperature profile over 24 hours, allowing for easy visualization of your schedule.

5. Maintenance

The VEMER OT1 thermostat requires minimal maintenance to ensure optimal performance.

- **Cleaning:** Wipe the exterior of the thermostat with a soft, dry cloth. Do not use abrasive cleaners, solvents, or spray directly onto the unit.
- **Inspection:** Periodically check the wiring connections at the terminal block to ensure they are secure. This should only be done by a qualified person with power disconnected.
- **Software Updates:** Check the VEMER website for any available firmware updates, though these are typically not user-installable for this type of device.

6. Troubleshooting

If you encounter issues with your VEMER OT1 thermostat, refer to the following common problems and solutions:

Problem	Possible Cause	Solution
Thermostat display is blank.	No power from the OpenTherm bus.	Check boiler power supply and OpenTherm wiring connections. Ensure the boiler is operational.
Heating not turning on/off as scheduled.	Incorrect programming or operating mode.	Verify the thermostat is in "Auto" mode and "Winter" operating mode. Review your weekly program settings.
Heaters remain constantly on (even below set temperature).	Incompatibility with specific boiler models (e.g., some Unical or Beretta boilers) or OpenTherm communication issue.	Ensure your boiler is fully OpenTherm compliant and compatible with modulating thermostats. Consult your boiler's manual or a qualified technician. This issue has been reported with some boiler models.
Temperature readings seem inaccurate.	Thermostat location affected by drafts, direct sunlight, or heat sources.	Relocate the thermostat to a more suitable position, away from external influences.
Thermostat not communicating with the boiler.	Wiring issue or boiler OpenTherm port problem.	Check wiring connections. Consult a qualified technician to diagnose boiler OpenTherm port functionality.

If problems persist after attempting these solutions, contact VEMER customer support or a certified HVAC professional.

7. Specifications

Feature	Detail
Brand	VEMER
Model Number	VE794100
Model Name	OT1
Color	White
Product Dimensions (L x W x H)	4 x 17 x 14 cm
Item Weight	150 grams
Voltage	230 Volts (via OpenTherm bus)
Special Feature	Modulating OpenTherm Chronothermostat
Controller Type	Push Button
Temperature Control Type	Automatic
Connectivity Technology	Wi-Fi (Note: The primary communication for this thermostat is via the OpenTherm bus. While "Wi-Fi" is listed in some specifications, the core functionality described relies on the OpenTherm protocol for boiler modulation. Please refer to the product packaging or VEMER's official documentation for definitive connectivity features.)
Power Source	Communication bus on standard OpenTherm protocol

Feature	Detail
Country of Origin	Italy
ASIN	B0BC1BV9J1

Note on Connectivity: The primary communication for this thermostat is via the OpenTherm bus. While "Wi-Fi" is listed in some specifications, the core functionality described relies on the OpenTherm protocol for boiler modulation. Please refer to the product packaging or VEMER's official documentation for definitive connectivity features.

8. Warranty and Support

Information regarding specific warranty terms for the VEMER VE794100 OT1 thermostat is not provided in the product details. For warranty claims or detailed support, please refer to the documentation included with your product or contact VEMER customer service directly.

Spare Parts Availability: Information regarding the availability of spare parts for this product is currently unavailable.

For further assistance, visit the official VEMER website or contact your local distributor.

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