

#### **USER GUIDE**

## **TP12**

Day & Night Thermostat with Adjustable Differential



www.grozonecontrol.com

#### **TABLE OF CONTENTS**

SAFETY NOTICE	3
PRODUCT DETAILS	4
INSTALLATION & OPERATION	5
OPTIONAL SETTINGS/HEATING	6
OPTIONAL SETTINGS/COOLING	7
QUICK TROUBLESHOOTING GUIDE	8-9
COMPLETE TROUBLESHOOTING GUIDE	10-11
WARRANTY & CUSTOMER SERVICE	12-13

#### **SAFETY NOTICE**

#### IMPORTANT SAFETY INSTRUCTIONS SAVE THESE INSTRUCTIONS

### DANGER TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, CAREFULLY FOLLOW THESE INSTRUCTIONS.

To reduce the risk of electric shock, disconnect power to the 120V electrical outlet before installing or removing the unit. When removing the electrical wall plate, it may fall across plug pins or become displaced.

To reduce the risk of electric shock, this product has a grounding type plug that has a third (grounding) pin. This plug will only fit into a grounding type power outlet. If the plug does not fit into the outlet, contact a qualified electrician to install the proper outlet. Do not change the plug in any way.

#### **PRODUCT DETAILS**

#### **Operation and Specifications**

Temperature setpoint between 55°F and 95°F / 13°C to 35°C.

Adjustable Differential from 4°F to 20°F / 2°C to 11°C.

**Example**: In Cooling mode, if Setpoint is 75°F and Differential is 10°F (±5°F), then the output will turn ON at 80°F and turn OFF at 70°F.

6-ft temperature probe operates from 32°F to 212°F (0°C to 100°C).

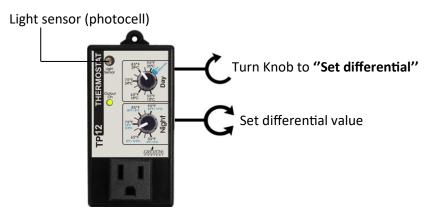
Electrical Specifications: See the rating label on your product.

#### **INSTALLATION & OPERATION**

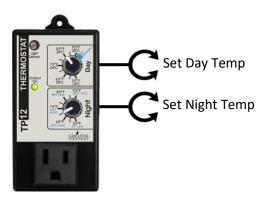
Note: This unit has been set to perform in Cooling Mode. For Heating Mode, refer to Optional Settings.

**1**-Plug into 120 VAC outlet (see security notice on page 1).

#### 2-Set Differential



#### 3-Set Values



4-Place the sensor at desired location.

**5-**Connect the heating or cooling equipment in the front panel outlet **(MAX 15A).** 

#### Installation is now complete

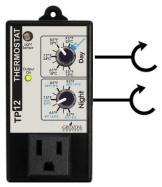
#### **OPTIONAL SETTINGS/HEATING**

#### **Change to Heating Mode**

**A.** Unplug the unit. Set both values to minimum.



**B.** Within 5 seconds, plug in the unit then set both values to maximum.



C. "Output On" light turns ON

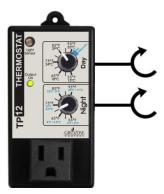


TP12 is now in heating mode

#### **OPTIONAL SETTINGS/DAY CONTROL ONLY**

#### **Change to Cooling Mode**

**A.** Unplug the unit. Set both values to maximum.



**B.** Within 5 seconds, plug in the unit then set both values to minimum.



C. "Output On" light turns ON



TP12 is now in cooling mode

#### QUICK TROUBLESHOOTING GUIDE

# **Quick Troubleshooting Chart** Product Model: TP12

Perform test in a room where the temperature is between

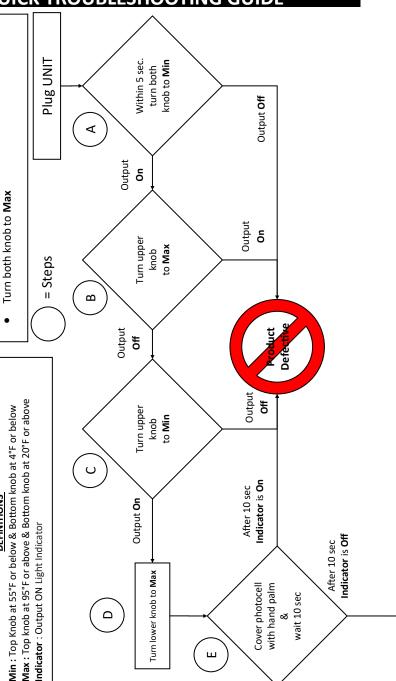
BEFORE YOU START

Perform test in a bright room

You will need a load to plug into UNIT\*

18°C - 24°C

Max: Top knob at 95°F or above & Bottom knob at 20°F or above Min: Top Knob at 55°F or below & Bottom knob at 4°F or below **DEFINITIONS** 



#### NG **GUIDE** QUICK TROUBLESHOOTI Indicator stays On & **O**ff tial and then adjust lower knob Turn upper knob to set differen ooth directions knob slowly in to 20°F/11°C Turn upper within a range of ± 2°F of Indicator turns On & Off room temperature Product Good Turn upper knob to set differential then adjust lower knob to 4° Verify that the temperature ambient room temperature is corresponding to the F/2°C & load are I Indicator ő Indicator & load are Off Output Warm temperature probe in ₽ your hand Indicator stay On & Off Output On upper knob to Indicator turns knob slowly in both directions Max until the Rotate slowly Turn upper 0 ₽ G On & Off within a range Rotate slowly upper the indicator turns knob to Max until \*Before test, check if load is working properly. of ± 10°F of room Indicator turns temperature After 10 sec Indicator is ₽ ő z Σ and plug load photocell & knob to Min wait 10 sec. Furn upper into UNIT Uncover Indicator & load are On Indicator is Off After 10 sec Indicator & load are Off

#### **COMPLETE TROUBLESHOOTING GUIDE**

## Day & Night Thermostat with adjustable differential TP12

#### 1 – Before you start

\*\*\*IMPORTANT: READ AND FOLLOW THESE INSTRUCTIONS BEFORE STARTING THE TEST.

- THE UNIT MUST BE UNPLUGGED.
- DO NOT PLUG A LOAD INTO THE OUTLET UNTIL STEP 9.
- LIGHTING CONDITION: Perform this test in a room with enough light for the controller to detect a DAY condition.
- TEMPERATURE: Perform this test in a room where ambient temperature is between 65°F and 75°F (18°C and 24°C).
- DEFINITIONS: CW = clockwise, CCW = counter clockwise.
- TURN BOTH KNOBS FULLY CW BEFORE GOING TO STEP 1.

#### 2 – Test

STEP	HANDLING AND TEST DESCRIPTIONS	EXPECTED RESULTS
1	<ul> <li>Plug the unit into the power outlet.</li> <li>WITHIN 5 SECONDS, turn BOTH KNOBS fully CCW.</li> </ul>	Output On indicator will turn ON.
2	Turn UPPER KNOB fully CW.	Output On indicator will turn OFF.
3	Turn UPPER KNOB fully CCW.	Output On indicator will turn ON.
4	Turn LOWER KNOB fully CW.	Output On indicator will stay ON.

#### COMPLETE TROUBLESHOOTING GUIDE

STEP	HANDLING AND TEST DESCRIPTIONS	EXPECTED RESULTS
5	Cover the <b>Light Sensor</b> completely with the palm of your hand or black electrical tape (a single finger will NOT cover the sensor appropriately).	Output On indicator will turn OFF after 6 to 8 seconds.
6	• Uncover the <b>Light Sensor</b> and wait 6 to 8 sec.	Output On indicator will turn ON after 6 to 8 seconds.
7	<ul> <li>Turn UPPER KNOB to SET         DIFFERENTIAL and adjust LOWER knob to 20°F/11°C. Then turn UPPER KNOB slowly in both directions.     </li> </ul>	Output On indicator will turn ON and OFF within a range of ± 10°F from room temperature.
8	<ul> <li>Turn UPPER KNOB to SET         DIFFERENTIAL and adjust lower         knob to 4°F/2°C. Then turn UPPER         KNOB slowly in both directions.     </li> </ul>	Output On indicator will turn ON and OFF within a range of ± 2 °F from room temperature.
9	Turn UPPER KNOB fully CCW and Plug a load (lamp, pump.) into the controller outlet.	Output On indicator and the load will turn ON.
	<ul> <li>Slowly turn the UPPER KNOB CCW until the <b>Output On</b> indicator and the load turns OFF.</li> </ul>	<b>Output On</b> indicator and the load will turn OFF.
10	<ul> <li>Heat the temperature sensor by blowing on it.</li> </ul>	The <b>Output On</b> indicator will turn ON once the ambient temperature reaches 2°F/1°C higher than the setpoint.

#### **WARRANTY & CUSTOMER SERVICE**

DO YOU HAVE A PROBLEM WITH YOUR CONTROLLER? PLEASE READ THESE INSTRUCTIONS CAREFULLY AND SAVE THEM FOR FUTURE REFERENCE.

- 1. I think my controller is damaged, or it simply does not work as indicated in the user guide, what should I do?
- Please refer to the troubleshooting steps. Follow these instructions carefully, step by step. The controller should work as described in the "Expected results" column of the Complete Troubleshooting Guide.

Do you need assistance on executing the Troubleshooting steps?

- 1. Contact us at 1-855-262-1800
- 2. Send us an EMAIL at service@grozonecontrol.com
- 3. VISIT our Technical Support Center at www.grozonecontrol.com/techsupport.html

Technical Support is available Monday through Friday, from 8:00 AM to 8:00 PM, Eastern Time.

#### **WARRANTY & CUSTOMER SERVICE**

- 2. I've been through the troubleshooting steps. What do I do if I meet a problem at any of these steps? Is my product covered by the WARRANTY?
- Grozone controllers are covered by a 3-year warranty (\*). We will replace any DAMAGED PRODUCT WITH A BRAND NEW PRODUCT.
- <u>Covered or not covered?</u> We do not authorize the replacement of fully
  working products nor altered (tampered) products. The Troubleshooting
  steps will help you identify a damaged product. Do not hesitate to
  contact us or contact your retailer to make sure the controller is not fully
  working or damaged before returning it to the store.
- My product is not fully working or damaged, I want a replacement unit: in order to get a replacement product, you MUST return all modules and applicable accessories to the retailer. To avoid being charged for the accessories, be sure to include all pieces. Thanks for your cooperation.
- Any Grozone Control product that is returned with obvious signs of user neglect will not be covered by the warranty. Grozone Control exercises the right to make final decisions in these matters.

(\*)The warranty period begins from the date of purchase at the retail level. The retailer/consumer must keep their proof of sale/purchase. Otherwise, Grozone Control will consider the manufacturing date to apply the warranty coverage.

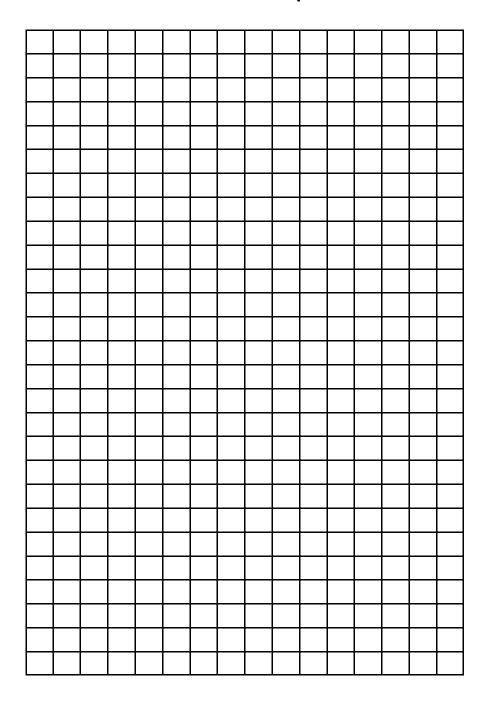
#### IMPORTANT MESSAGE TO RETAILERS

Retailers must call Grozone Control to get authorisation to replace the defective product and a RMA number.

1-855-262-1800

#### **NOTE**

#### **Room Setup**







Rev. 3.0 www.grozonecontrol.com