

BZ33-201NP

Installation Manual

breeze33.com



Table of Contents Page

•	
Installation Tips	3
Subbase Installation	4
Wiring	5 -12
Thermostat Operation	13 -14
Thermostat Quick Refernce	15-17
Technician Setup Menu	18-23
Terminal Designations	24
-	



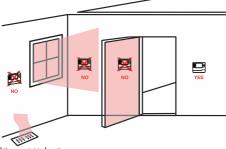
Caution

Equipment damage hazard. Do not operate the cooling system if the outdoor temperature is below 50 °F (10 °C) to prevent possible compressor damage.

Installation Tips

Wall locations

The thermostat should be installed approximately 4 to 5 feet above the floor. Select an area with average temperature and good air circulation.



Do not install thermostat in locations:

- Close to hot or cold air ducts
- That are in direct sunlight
- With an outside wall behind the thermostat
- . In areas that do not require conditioning
- Where there are dead spots or drafts (in corners or behind doors)

Where there might be concealed chimneys or pipes

Tip

Pick an installation location that is easy for the user to access. The temperature of the location should be representative of the building.



Subbase Installation



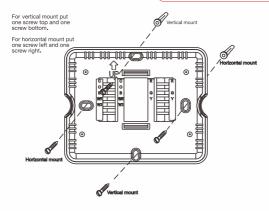
Caution: Electrical Hazard

Failure to disconnect the power before beginning to install this product can cause electrical shock or equipment damage.



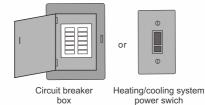
Mercury Notice:

Mercury Notice:
All of our products are mercury
free. However, if the product you
are replacing contains mercury,
dispose of it properly. Your local
waste management authority
can give you instructions on
recveling and proper disposal.



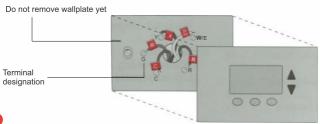
Wiring

1 Turn Off Power to Heating/Cooling System



2 Remove Old Thermostat

Remove old thermostat but leave wallplate with wires attached.

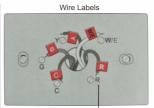


5

3 Label Wires with Tags

Label the wires using the supplied wire labels as you disconnect them.

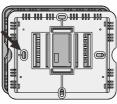
Wiring Labels Apply these wiring labels to each wire with the appropriate terminal designation as you remove it from the existing thermostat.		Lorsqui des bor existan sur cha	Étiquettes de fils Lorsque vous retirez les fils des bornes du thermostat existant, collez oes étiquettes sur chaque fil correspondant à la lettre de la borne.			Rótulos para los cables Coloque estos rótulos, con la designación de las termina - les, en cada cable al remover los cables del termostato actual.				
	В	В	Y2	Y2	С	С	W/E	W/E	F	F
	G	G	н	н	L	L	0	0	Р	Р
	R	R	RC	RC	RH	RH	Т	т	U	U
	V/VR	V/VR	W	W	W1	W1	W2	W2	W3	W3
	×	×	X1	X1	X2	X2	Υ	Υ	Y1	Y1
	AUX	AUX								



Terminal designation

4 Separate Wallplate from New Thermostat

Remove wallplate from the new thermostat and mount onto wall.

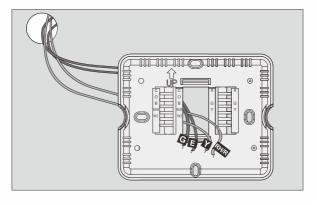


Wallplate

Wiring

5 Separate Wallplate from New Thermostat

Mount the new wallplate using the included screws and anchors.

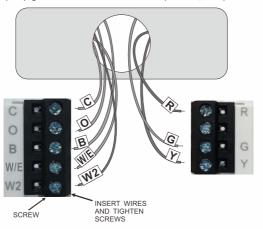


Drill 3/16-in. holes for drywall Drill 3/16-in. holes for plaster

6 Connect Wires

Simply match wire labels.

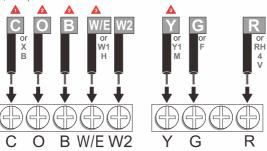
If labels do not match letters on the thermostat, check "Alternate Wiring (Conventional Systems)" on page 9 and connect to terminal as shown (see notes, below).



Wiring

Alternate Wiring (Conventional Systems)

If labels do not match letters on the thermostat, check the chart below and connect to terminal as shown here (See notes, below).



- ▲ If there has C or X wire available then you can connect with C terminal, if there is no C or X wire then no need to connect with C terminal.
- A If you have a heat pump without auxiliary/backup hear connect **O** or **B**, not both. If you do not have a heat pump, do not connect **B**. Wrap bare end of wire with electrical tape.
- Place a jumper (plece of wire) between Y and W if you are using a heat pump without auxiliary/backup heat



Caution: Electrical Hazard Failure to disconnect the power before beginning to install this product can cause electrical shock or equipment damage.

Wiring

- If you are replacing a thermostat, make note of the terminal connections on the thermostat that is being replaced. In some cases the wiring connections will not be color coded. For example, the green wire may not be connected to the G terminal.
- Loosen the terminal block screws. Insert wires then retighten terminal block screws.
- Place nonflammable insulation into wall opening to prevent drafts.



Warning:

All components of the control system and the thermostat installation must conform to Class II circuits per the NEC Code.

Terminal Designations

-		
	Heat Pump System 1 HEAT 1 COOL / 2 HEAT 1 COOL	Conventional System 1 HEAT 1 COOL/2 HEAT 1 COOL
R	Transformer Power	Transformer Power
С	Transformer Common	Transformer Common
В	Changeover Valve Energized in HEAT	Energized in HEAT
0	Changeover Valve Energized in COOL	Energized in COOL
G	Fan Relay	Fan Relay
W/E	First Stage of Emergency HEAT	First Stage of HEAT
W2	Second Stage of HEAT/ EMERGENCY HEAT	Second Stage of HEAT
γ	First Stage of HEAT and COOL	First Stage of COOL

Installation Tip:

Do not overtighten terminal block screws, as this can damage the terminal block. A damaged terminal block can keep the thermostat from fitting on the subbase correctly or cause system operation issues. Max Torque = 6in-lbs.

Wiring

Λ

Power supply



Use either O or B terminals for changeover valve

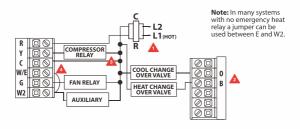


Optional 24 VAC common connection when thermostat is used in battery power mode.



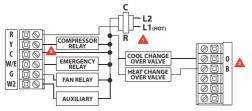
Jumper (not supplied)

2H/1C Heat Pump System



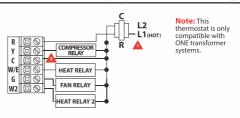


Typical 2H/1C Heat Pump System with separate emergency heat

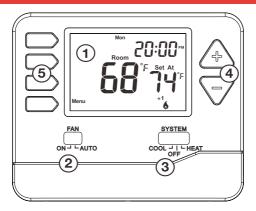


Conventional System 1H/1C, 2H/1C

(Heat pump set to "OFF" in tech settings)



Thermostat Operation



- LCD Display
- Fan Switch
- System Switch

Temperature Setpoint Buttons

User Buttons

Thermostat Operation

(1) LCD Display
See page 15 for details about this display read out.

2 Fan Switch

Select **ON** or **AUTO**. **ON** will run the fan continuously. **AUTO** will cycle the fan on only when the heating or cooling system is on.

System Switch
Selects the operation mode
on your HVAC system.
Selecting HEAT turns on
the heat mode. Selecting
COOL turns on the cool
mode. Selecting OFF turns
both heating and cooling
off.

4) Temperature Setpoint Buttons

Press the + or - buttons to select the desired room temperature.

5 User Buttons

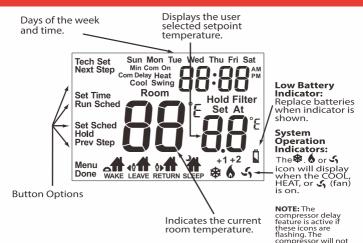
Use these buttons to set up your options.
Refer to the next page for detail.



Caution:

When the battery icon appears replace your AAA batteries immediately, Failure to do so may result in your heating & cooling system becoming inoperable.freezing or over heating can occur.

Thermostat Quick Reference



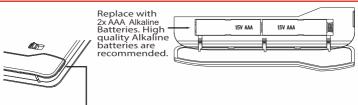
turn on until the 5 minute delay has elapsed.

Thermostat Quick Reference



The low battery indicator is dispalyed when the 2x AAA battery power is low.

Battery Door Information



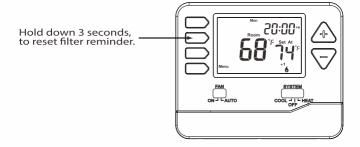
Use the finger bevel on the lower portion of the thermostat to open the easy access battery door.

Thermostat Quick Reference

Filter Change Reminder

If your HVAC contractor has configured the thermostat to remind you when the air filter needs to be changed, you will see **FILTER** in the display when your air filter needs to be changed.

Resetting the filter change reminder: When FILTER reminder is displayed, you should change your air filter and reset the reminder by holding down the second button from the top left side of the thermostat for 3 seconds.



Set Time

- 1. Press the MENU button
- 2. Press SET TIME
- 3. Day of the week will be flashing. Use the to select the current day of the week.
- 4. Press NEXT STEP
- 5. The current hour is flashing. Use the select the current hour. When using 12-hour time, make sure the correct a.m. or p.m. choice is selected.
- 6. Press NEXT STEP
- 8. Press **DONE** when completed.

- 1.Press MENU button.
- 2.Press and hold TECH SET button for 3 seconds.
- 3.Configure the installer options as desired using the table below. Use the + OR keys to change settings and the NEXT STEP or PREV STEP key to move from one option to another.

Note: Only press DONE key when you want to exit the Technician Setup Options.

Tech Setting	S	LCD Will Show	Adjustment Options	Default
Filter Change Reminder	This feature will flash "FILT" in the display after the elapsed run time to remind the user to change the filter. A setting of "OFF" will disable this feature.	Next Step OFF FL SE	You can adjust the filter change reminder from OFF to 2000 hours of runtime in 50 hour increments. Tap the second button from the top left side of the thermostat to display the current filter elapsed runtime.	0FF
Room Temperature Calibration	This feature allows the installer to change the calibration of the room temperature display. For example, if the thermostat reads 70° degrees and you would like it to read 72° then select +2.	Next Step CAL OF Prev Step	You can adjust the room temperature display to read 3° above or below the factory calibrated reading.	0
Minimum Compressor On Time	This feature allows the installer to select the minimum run time for the compressor. For example: a setting of 4 will force the compressor to run for at least 4 minutes every time the compressor turns on, regardless of the room temperature.	Next Step OFF	You can select the minimum compressor run time from "off", "3", "4", or "5" minutes. If 3,4, or 5 is selected, the compressor will run for at least the selected time before turning off.	OFF

Tech Setti	ngs	LCD Will Show	Adjustment Options	Default
Compressor Short Cycle Delay	The compressor short cycle delay protects the compressor from short cycling. This feature will not allow the compressor to be turned on for 5 minutes after it was last turned off.	Next Step ON Prev Step	Selecting "ON" will not allow the compressor to be turned on for 5 minutes after the last time the compressor was switched off. Select "OFF" to remove this delay.	ON
Cooling Swing	The swing setting often called "cycle rate", "differential" or " anticipation" is adjustable. A smaller swing setting will cause more frequent cycles and a larger swing setting will cause fewer cycles.	Next Step dF CO 0.5°F Prev Step	The cooling swing setting is adjustable from 0.2" to 2". For example: A swing setting of 0.5" will turn the cooling on at approximately 0.5" above the setpoint and turn the cooling off at approximately 0.5" below the setpoint.	0.5
Heating Swing	The swing setting often called "cycle rate", "differential" or "anticipation" is a djustable. A smaller swing setting will cause more frequent cycles and a larger swing setting will cause fewer cycles.	Next Step dF HE GH*F Prev Step	The heating swing setting is adjustable from 0.2° to 2°. For example: A swing setting of 0.5° will turn the heating on at approximately 0.5° below the setpoint and turn the heating off at approximately 0.5° above the setpoint.	0.4

Tech Se	ttings	LCD Will Show	Adjustment Options	Default
ForC	Select F for Fahrenheit temperature read out or select C for Celsius read out.	Next Step of	F for Fahrenheit C for Celsius	F
		Prev Step		
12 or 24 Hour Clo		Next Step	Use the 🛨 and 🖃 to select 12 or 24 hour clock.	24H
		Prev Step		
Fan Operatio	Select GAS for systems that control the fan during a call for heat. Select ELEC to have the thermostat control the fan during a call for heat.	Next Step 9R5 Prev Step	GAS - GS or ELEC - EL	GAS

Tech Setti	ngs	LCD Will Show	Adjustment Options	Default
Heat Pump	When turned on the thermostat will operate a heat pump. EM. Heat will show as an option in the system switch tech setting. Use the and button to adjust.	HEAT PUMP	OFF configures the thermostat for conventional systems. ON configures the thermostat for heat pump systems.	ON
GAS AUX	In HEAT mode (HEAT pump set to ON), Y will turn off automatically after W2 relay is turned ON for 45 seconds.	AG ON	Use the + and - to select on or off.	ON

Terminal Designations

W2 Auxiliary heat relay
Y Compressor relay
G Fan relay
O Heat pump changeover valve
energized in cooling
R Transformer power
C Common wire from system transformer
B Heat pump changeover valve
energized in heating
W/E Emergency heat relay

Note:

In many systems with no emergency heat relay a jumper can be installed between E and W2.

Warranty

WARRANTY

Breeze33 Products LLC (Breeze33) warrants to the ORIGINAL PURCHASER that its thermostats shall be free from defects in material and workmanship under normal use and service for a five (5) years. This warranty cannot be transferred - it is extended only to the original Purchaser or First User of the Product. By accepting and keeping this Product you agree to all of the warranty terms and limitations of liability described below.

Breeze33's obligations under the warranty set forth above shall be to replace any Breeze33 Thermostat which is defective.

WHAT IS NOT COVERED?

The warranty above does not cover and Breeze33 is not liable for, (i) installation, (ii) any labor charges or (iii) products which have been damaged as a result of any accident, misuse, abuse, neglect, improper installation or maintenance, the use of abrasive or organic solvent cleaners, modification, failure to use the register, grille, or diffuser in accordance with instructions provided by Breeze33.

HOW TO OBTAIN WARRANTY SERVICE

Contact our warranty department at 740-314-4404 to report the defect. Return failed product with proof of purchase, your name, and address within 30 days of failure to:

Breeze33 Products LLC 350 Courtney Road Sebring, Ohio 44672 USA



LIMITATION OF LIABILITY

Breeze33's liability on any claim of any kind, including, without limitation, warranty, negligence and/or breach of contract, shall in no case exceed the purchase price paid by the Customer. IN NO EVENT SHALL BREEZE33 BE LIABLE FOR ANY SPECIAL, INCIDENTAL, CONSEQUENTIAL (INCLUDING, WITHOUT LIMITATION, DAMAGETO PROPERTY) OR PUNITIVE DAMAGES, DAMAGES IN THE NATURE OF PENALTIES OR SIMILAR OR RELATED DAMAGES OF ANY KIND.

DISCLAIMER OF WARRANTIES

BREEZE33 EXPRESSLY DISCLAIMS ALL WARRANTIES, EXCEPT AS EXPLICITLY STATED HEREIN, TO THE FULLEST EXTENT PERMITTED BY LAW, WHETHER WRITTEN, ORAL, EXPRESS OR IMPLIED, INCLUDING ANY WARRANTY OF PERFORMANCE, MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, AND NONINFRINGEMENT. THIS DISCLAIMER INCLUDES ANY ORAL WARRANTIES OR REPRESENTATIONS MADE OR IMPLIED BY ANY AGENT, EMPLOYEE, SUBCONTRACTOR, MANAGER, DIRECTOR AND/OR REPRESENTATIVE OF BREEZE33.





