

Climate Right®

Powered by Hitachi® air compressors

Assembly and Instruction Manual



Tacom Limited

82 E Main Street

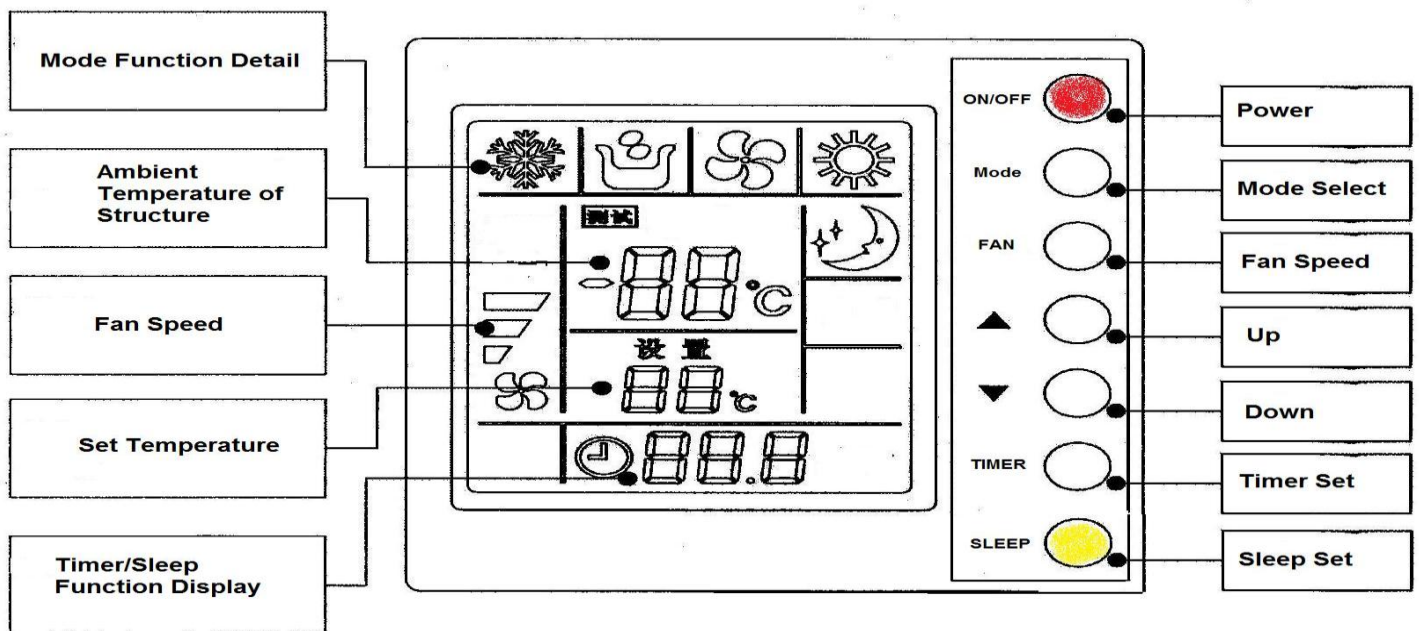
Suite 101

West Jefferson, OH 43162

Operation Modes:

1. Automatic Function
2. Air Conditioning
3. Dehumidifying
4. Heating

Controls and Display:



Mode Function Detail: This displays A/C mode, Dehumidify mode, Fan only Mode and Heater Mode. The system will default to Automatic Mode when first turned on.

Ambient Temperature: This is temperature of the air inside the structure you are conditioning.

Fan Speed: This is the current set fan speed or the actual fan speed in Automatic Mode.

Set Temperature: This is the temperature at which you desire the inside of the structure to be set. The default temperature is 75 degrees Fahrenheit. Temperatures set limits are 61-88 degrees Fahrenheit.

Timer/Sleep Display: This shows the current time set or time remaining in timer or sleep modes. When the unit is operating you can set the OFF time. When the unit is OFF you can set the start time. Range 1-12 hours.

Power: Turns unit off or on.

Mode Select: This selects the unit from Automatic to A/C, Dehumidify, Fan only (for ventilation) or Heat mode.

Fan Speed: This selects the speed of the fan if not in Automatic mode.

Up/Down: This changes temperature, fan or timer settings.

Timer Set: This activates the timer function. When unit is operating you can adjust /set the OFF time. When unit is OFF you can set the start time.

Sleep Set: This makes the unit go to “sleep”.

Initial Setup of Climate Right®:

Once unit is installed, it is necessary to go through a start up procedure to “prime” the unit for normal operation. This is done for the A/C only and is required for first start and all first season starts with A/C usage.

Prime unit first:

First please turn on the unit and set to lowest possible A/C or Automatic setting. Let unit run for 10 minutes and shut off. Let unit sit idle for 3-5 minutes and restart. Make sure on restart to have the lowest temperature set and let run for an additional 10 minutes. This will distribute the A/C oil to all the necessary areas for proper function and allow for the compressor to run at its optimum for a long life and great efficiency.

Operation:

Once you turn your new Climate Right® on and have it primed the unit will default to Automatic mode with a set temperature of 75 degrees Fahrenheit. You can simply leave it there or adjust hotter or colder as desired. In Automatic mode your Climate Right® will do all the work to keep you in your “comfort Zone”.

If you desire you can manually set the unit for A/C, Dehumidify or Heat Only. Press the Mode select switch to toggle between the different modes. Once the desired mode is set then adjust the set temperature.

There is a timer function that will allow the unit to run for a desired length of time and then shut off or remain off for a desired amount of time and then turn on. To set this timer function to turn the unit on just plug the unit in, the display lights up, then select your desired mode and temperature prior to setting the timer. Push the timer button and select the amount of time to pass until the desired time to turn on. To set the timer to make the unit shut off after operating for a desired time, with unit operating, just push the timer button and set the amount of time until the desired shut off is reached.

Operating Functions of your Climate Right®:

Your climate unit is designed to condition the climate of your air in three ways, **air conditioning, dehumidifying and heating**. The unit will operate in only one of these modes at a time. These modes can be set manually or to be performed automatically by the units CPU, Central Processing Unit. There are three fan speeds which can be selected manually or automatically by the CPU as needed during climate conditioning.

In A/C mode or Auto mode the fan will operate at all three of its speeds. If the OUTSIDE Temperature falls below the set temperature in some instances the CPU will turn off the fan. When it's required again the CPU will turn the fan back on. This is normal operation to save energy. The use of the A/C also serves as a Dehumidifier. Your new climate unit will lower the humidity levels to as low as 45% or less, helping to eliminate or stunt the growth of mildew or even mold. While operating the A/C it is normal for the unit to produce “condensation” or water which will drain out the bottom left side. **If this climate unit will be used indoors it is a must that a separate drain pan (NOT INCLUDED) be installed under the unit.** Please take this into consideration when mounting or installing the unit. Even though your climate unit is only 2500 BTU's it can still produce large amounts of condensation depending on inside humidity levels.

In Heat mode the CPU will cycle the fan as needed for heating the air. The CPU will not allow the conditioned air to go above 90 degrees Fahrenheit and in Auto mode the A/C will turn on to keep this from happening.

This climate unit is rated at 2500 BTU's. It operates by gradually cooling or heating smaller structures. It will not rapidly heat or cool like larger units. The unit is designed with recycling air technology to both heat and cool by drawing air in from the structure being climate controlled and conditioning it and sending it back to the structure. This saves a tremendous amount of energy. A small portion of outside air is mated with recycled air to keep air fresh and not stale. There are two pollen filters that can be attached to the unit over the inlet and outlet pipes of the Climate Right® unit. These are for helping to control particles of pet dander and fur if used for dog houses, pollen and dust for other structures. These are easily removable and can be clean many times. Depending on usage, check as often as necessary.

Maintenance:

Your Climate Right® climate control unit should be a low maintenance product and not require much attention if used in normal environments. Over time with normal usage however there are a few things that may need to be addressed.

1. Filters. If used in the inlet and outlet pipes they will get dirty over time. Please remove and clean as desired.
2. Condenser. On the right side of the unit there is the condenser. If you notice the cooling ability of the unit degrading or if the cooling fins of the condenser become dirty they will need to be cleaned. Compressed air should be used to gently blow the unit out.

Note: Failure to properly care for your Climate Right® unit as mentioned above will result in the Warranty to be voided.

Uses:

Climate Right® can be used in a variety of ways. The possibilities are endless. We have many customers who currently use the unit for climate conditioning of dog houses, toll booths, tents, small recreational trailers, personal cooling in hot or cold environments, electronic equipment, small wine cellars, cigar storage rooms and many more! Climate Right® was designed using the best components such as Hitachi® compressors and all brass components and piping to ensure whatever your use, it will condition your climate efficiently, reliably and quietly!

These units are so efficient they can be used with most generators. We recommend the Honda® powered eU2000i or any other unit of the same output.

Accessories:

Climate Right® offers a "portability" kit that includes heavy duty, rough terrain wheels and a longer secondary pull handle to make moving the unit a breeze for construction site workers, campers and anyone else who finds the need for them.

Summary:

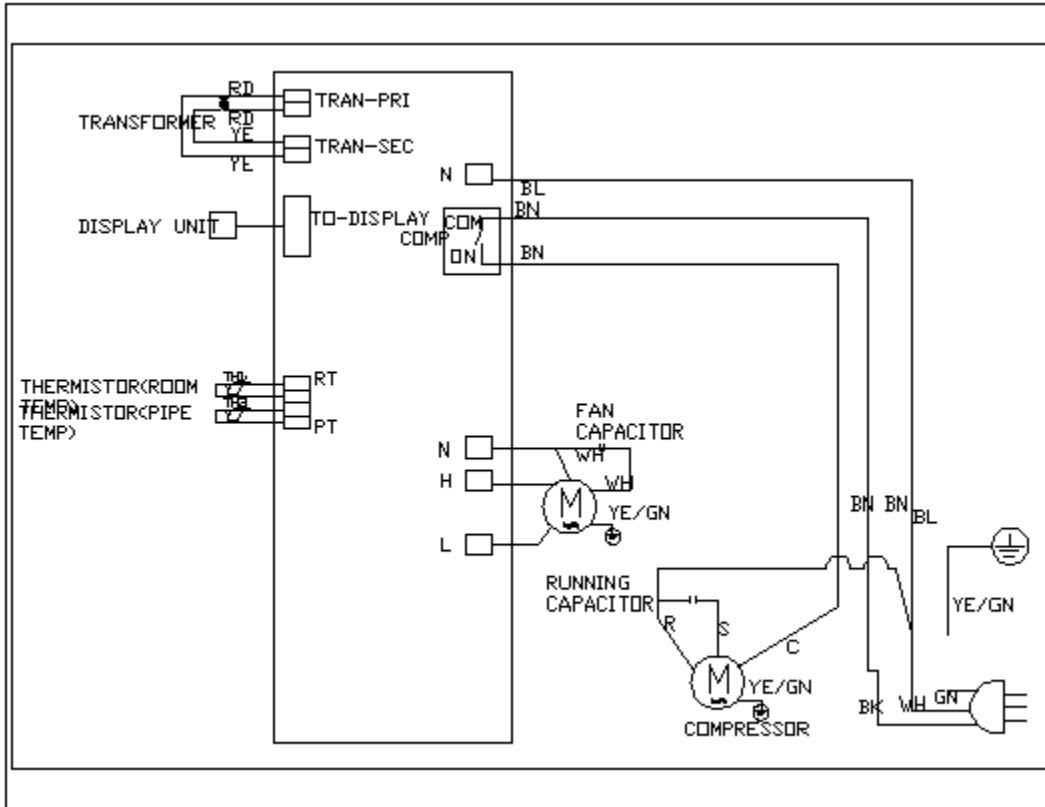
Thank you for your purchase and becoming one of the many people and pets to enjoy the benefits of the climate controlled air by Climate Rite®. We are confident that our unit will provide you with many years of comfort and peace of mind. If you have any questions or comments please feel free to contact us at:

Tacom Limited

82 E Main Street

Suite 101

Wiring Diagram:



Specifications:

Cooling capacity	2500BTU
Hitachi Compressor Model	YB645WMCC
Heating capacity	1800BTU
Input Power	0.72kW
Power Supply	115v/1hp/60Hz
Current	3.6a
Refrigerant	R134a
Air Filter net	Nylon net

Noise	≤54dB
Overall dimensions	18x14x15 Inches
Weight	43 lbs.

General System Diagnosis:

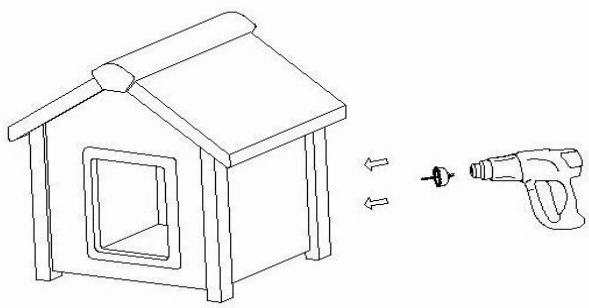
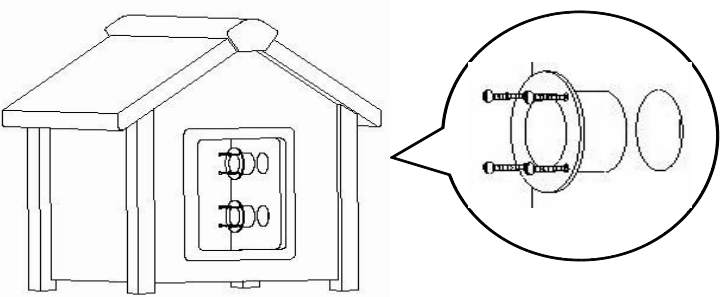
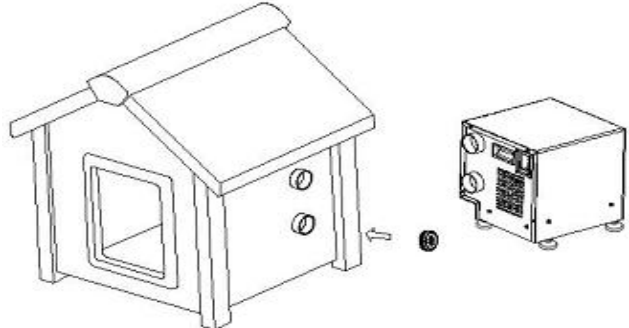
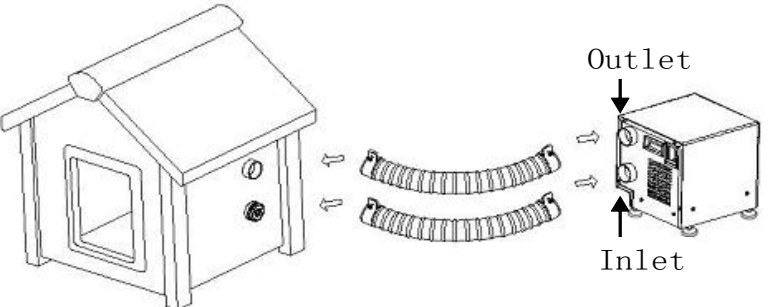
1. The unit does not work. Check to see if plugged in or has adequate power supply. (Re-secure plug or re-set breaker).
2. Fans are running but not cooling. Check capacitor for compressor or possible low on refrigerant, R134A. (Replace Capacitor or compressor, Refill with proper amount of R134A 1.3lbs.) Service valve is included inside unit!
3. Excessive vibration/Noise. Please check all fasteners/screws and compressor mounting (Adjust if necessary).
4. Intermittent fan noise. Check fan shroud/surround on either condenser fan or blower fan (Adjust if necessary).
5. Cooling or heating function decreased. Check filters or Condenser fins on right side of unit. Make sure the filters are clean.
6. No heat. Check fan switch or heating element (Replace as necessary).
7. Display does not show temperature. Check if the two sensors on evaporator are plugged in or damaged. (Replace if necessary).
8. Fault codes in bottom of display or no A/C:
 - A. Fault E01 – Indoor temperature sensor fault, wiring or sensor.
 - B. Fault E02- Evaporator temperature sensor fault, wiring or sensor.
 - C. Fault E06 – If within 30 minutes there are 3 compressor over current protection faults, the compressor will no longer turn on due to low on Freon R134A.

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Internal Parts List:

1. Compressor
2. Evaporator
3. Condenser
4. Pressure Valves
5. Compressor Capacitor
6. Evaporator, condenser fan shroud
7. Fan Motor 1 or 2
8. Fan Speed Switch
9. Refill needle valves
10. Anti-shock Pad for compressor
11. Compressor bolt
12. Temperature sensor
13. Controller ECU
14. Display
15. Wiring
16. Starter
17. Refrigerant R134A
18. Switch
19. Shell

Dog House Installation Instructions

<p>Step 1</p>	<p>Use your common electric drill and the hole saw we provide to drill two holes on the back or sidewall of dog house.</p>	
<p>Step 2</p>	<p>Insert both plastic couplers into the drilled holes from inside to outside and secure with screws provided.</p>	
<p>Step 3</p>	<p>Place the air-conditioner on a flat surface near previously installed couplers. Install micro screen over lower, air return, coupler.</p>	
<p>Step 4</p>	<p>Place metal screw clamps on ends of both hoses; connect one hose to upper coupler and upper outlet of Climate Right™ and connect the other hose to the lower coupler with filter to the lower inlet of Climate Right™.</p>	
<p>Finish</p>	<p>Tighten all 4 metal clamps being careful to not overtighten. Turn unit on, set temperature and let your pet(s) enjoy their new environment!</p>	