This manual only describes the installation of the indoor unit. When installing the outdoor unit, refer to the installation manual of outdoor unit.
CONGRATULATIONS...

on your purchase of Ideal Air’s Pro | Mini-Split, indoor, wall mount unit. We’re proud to offer this product and believe it’s the very best in its class.

READ THIS MANUAL

Please read through these instructions before you start the installation process. Improper installation can cause damage to the unit, your personal property, and also poses a personal safety hazard.

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</tbody>
</table>
SAFETY PRECAUTIONS

READ SAFETY PRECAUTIONS BEFORE INSTALLATION:
Incorrect operation due to ignoring instructions can cause serious damage or injury.
The seriousness of potential damage or injuries is classified as either a WARNING or CAUTION.

⚠️ WARNING
This symbol indicates that ignoring instructions may cause death or serious injury.

⚠️ CAUTION
This symbol indicates that ignoring instructions may cause moderate injury to you, or damage to your unit or other property.

⚠️ WARNING

INSTALLATION WARNINGS
- Ask an authorized service technician to install this air conditioner. Inappropriate installation may cause water leakage, electric shock, or fire.
- All repairs, maintenance and relocation of this unit must be performed by an authorized service technician. Inappropriate repairs can lead to serious injury or product failure.

WARNINGS FOR PRODUCT USE
- If an abnormal situation arises (like a burning smell), immediately turn off the unit and pull the power plug. Call your dealer for instructions to avoid electric shock, fire or injury.
- DO NOT insert fingers, rods or other objects into the air inlet or outlet. This may cause injury, since the fan may be rotating at high speeds.
- DO NOT use flammable sprays such as hair spray, lacquer or paint near the unit. This may cause fire or combustion.
- DO NOT operate the air conditioner in places near or around combustible gases. Emitted gas may collect around the unit and cause explosion.

ELECTRICAL WARNINGS
- Only use the specified power cord. If the power cord is damaged, it must be replaced by a certified service agent.
- Keep power plug clean. Remove any dust or grime that accumulates on or around the plug. Dirty plugs can cause fire or electric shock.
- DO NOT pull power cord to unplug unit. Hold the plug firmly and pull it from the outlet. Pulling directly on the cord can damage it, which can lead to fire or electric shock.
- DO NOT use an extension cord, manually extend the power cord, or connect other appliances to the same outlet as the air conditioner. Poor electrical connections, poor insulation, and insufficient voltage can cause fire.
CLEANING AND MAINTENANCE WARNINGS

- Turn off the device and pull the plug before cleaning. Failure to do so can cause electrical shock.
- **DO NOT** clean the air conditioner with excessive amounts of water.
- **DO NOT** clean the air conditioner with combustible cleaning agents. Combustible cleaning agents can cause fire or deformation.

**CAUTION**

- If the air conditioner is used together with burners or other heating devices, thoroughly ventilate the room to avoid oxygen deficiency.
- Turn off the air conditioner and unplug the unit if you are not going to use it for a long time.
- Turn off and unplug the unit during storms.
- Make sure that water condensation can drain unhindered from the unit.
- **DO NOT** operate the air conditioner with wet hands. This may cause electric shock.
- **DO NOT** use device for any other purpose than its intended use.
- **DO NOT** climb onto or place objects on top of the outdoor unit.
- **DO NOT** allow the air conditioner to operate for long periods of time with doors or windows open.

UNIT SPECIFICATIONS AND FEATURES

UNIT PARTS

- **Front Panel**
- **Louver**
- **Display window**
- **Display window**

---

“**ON**” For 3 seconds when:
- TIMER ON is set
- FRESH, SWING, TURBO, or SILENCE features are turned on

“**OFF**” For 3 seconds when:
- TIMER OFF is set
- FRESH, SWING, TURBO, or SILENCE features are turned off

“**CF**” When anti-cold air feature is turned on

“**dF**” When defrosting

“**SC**” When unit is self-cleaning

“**FP**” When freeze protection is turned on

“**Wi**” When wireless control feature is activated (some units)

“**BB**” When ECO function (optional) is activated, the illuminates gradually one by one as ...... in one second interval.

Display Code Meanings

In FAN mode, the unit will display the room temperature.
In other modes, the unit will display your temperature setting.

NOTE:
A guide on using the infrared remote is not included in this literature package.
ACHIEVING OPTIMAL PERFORMANCE
Optimal performance for the COOL, HEAT, and DRY modes can be achieved in the following temperature ranges. When your air conditioner is used outside of these ranges, certain safety protection features will activate and cause the unit to perform less than optimally.

### INVERTER SPLIT TYPE

<table>
<thead>
<tr>
<th></th>
<th>COOL mode</th>
<th>HEAT mode</th>
<th>DRY mode</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Room Temperature</strong></td>
<td>17°C - 32°C</td>
<td>0°C - 30°C</td>
<td>10°C - 32°C</td>
</tr>
<tr>
<td></td>
<td>(63°F - 90°F)</td>
<td>(32°F - 86°F)</td>
<td>(50°F - 90°F)</td>
</tr>
<tr>
<td><strong>Outdoor Temperature</strong></td>
<td>0°C - 50°C</td>
<td>-15°C - 30°C</td>
<td>0°C - 50°C</td>
</tr>
<tr>
<td></td>
<td>(32°F - 122°F)</td>
<td>(5°F - 86°F)</td>
<td>(32°F - 122°F)</td>
</tr>
<tr>
<td></td>
<td>-15°C - 50°C</td>
<td>0°C - 60°C</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(5°F - 122°F)</td>
<td>(32°F - 140°F)</td>
<td></td>
</tr>
</tbody>
</table>

**FOR OUTDOOR UNITS WITH AUXILIARY ELECTRIC HEATER**
When outside temperature is below 0°C /32°F, we strongly recommend keeping the unit plugged in at all times to ensure smooth ongoing performance.

### FIXED-SPEED TYPE

<table>
<thead>
<tr>
<th></th>
<th>COOL mode</th>
<th>HEAT mode</th>
<th>DRY mode</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Room Temperature</strong></td>
<td>17°C-32°C</td>
<td>0°C-30°C</td>
<td>10°C-32°C</td>
</tr>
<tr>
<td></td>
<td>(63°C-90°F)</td>
<td>(32°C-86°F)</td>
<td>(50°C-90°F)</td>
</tr>
<tr>
<td><strong>Outdoor Temperature</strong></td>
<td>18°C-43°C</td>
<td>-7°C-24°C</td>
<td>18°C-43°C</td>
</tr>
<tr>
<td></td>
<td>(64°C-109°F)</td>
<td>(19°C-75°F)</td>
<td>(64°C-109°F)</td>
</tr>
<tr>
<td></td>
<td>-7°C-43°C</td>
<td>18°C-43°C</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(19°C-109°F)</td>
<td>(64°C-109°F)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>18°C-54°C</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(64°C-129°F)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**FOR SPECIAL TROPICAL MODELS**

**TO FURTHER OPTIMIZE THE PERFORMANCE OF YOUR UNIT, DO THE FOLLOWING:**
- Keep doors and windows closed.
- **DO NOT** block air inlets or outlets.
- Regularly inspect and clean air filters.

**OTHER FEATURES:**

- **AUTO-RESTART**
  If the unit loses power, it will automatically restart with the prior settings once power has been restored.

- **LOUVER ANGLE MEMORY (SOME UNITS)**
  When turning on your unit, the louver will automatically resume its former angle.

- **REFRIGERANT LEAKAGE DETECTION (SOME UNITS)**
  The indoor unit will automatically display “EC” when it detects refrigerant leakage.

**ANTI-MILDEW (SOME UNITS)**
When turning off the unit from COOL, AUTO (COOL), or DRY modes, the air conditioner will continue operate at very low power to dry up condensed water and prevent mildew growth.

**NOTE:**
Illustrations in this manual are for explanatory purposes. The actual shape of your indoor unit may be slightly different. The actual shape shall prevail.
SETTING ANGLE OF AIR FLOW

While the unit is on, use the SWING/DIRECT button to set the direction (vertical angle) of airflow.

- Press the SWING/DIRECT button once to activate the louver. Each time you press the button, it will adjust the louver by 6°. Press the button until the direction you prefer is reached.
- To make the louver swing up and down continuously, press and hold the SWING/DIRECT button for 3 seconds. Press it again to stop the automatic function.

SETTING HORIZONTAL ANGLE OF AIR FLOW

The horizontal angle of the airflow must be set manually. Grip the deflector rod (See FIG. B) and manually adjust it to your preferred direction. FOR SOME UNITS, the horizontal angle of the airflow can be set by remote control. Please refer to the Remote Control Manual.

CAUTION

DO NOT put your fingers in or near the blower and suction side of the unit. The high-speed fan inside the unit may cause injury.

NOTE: ON LOUVER ANGLES

When using COOL or DRY mode, DO NOT set louver at too vertical an angle for long periods of time. This can cause water to condense on the louver blade, which will drop on your floor or furnishings. (See FIG. A) When using COOL or HEAT mode, setting the louver at too vertical an angle can reduce the performance of the unit due to restricted air flow. DO NOT move louver by hand. This will cause the louver to become out of sync. If this occurs, turn off the unit and unplug it for a few seconds, then restart the unit. This will reset the louver.

SLEEP OPERATION

The SLEEP function is used to decrease energy use while you sleep (and don’t need the same temperature settings to stay comfortable). This function can only be activated via remote control. Press the SLEEP button when you are ready to go to sleep. When in COOL mode, the unit will increase the temperature by 1°C/2°F after 1 hour, and will increase an additional 1°C/2°F after another hour. When in HEAT mode, the unit will decrease the temperature by 1°C/2°F after 1 hour, and will decrease an additional 1°C/2°F after another hour. It will hold the new temperature for 5 hours, then the unit will turn off automatically.

NOTE: The SLEEP function is not available in FAN or DRY mode.
**MANUAL OPERATION**

**HOW TO OPERATE YOUR UNIT WITHOUT THE REMOTE CONTROL**

In the event that your remote control fails to work, your unit can be operated manually with the MANUAL CONTROL button located on the indoor unit. Note that manual operation is not a long-term solution, and that operating the unit with your remote control is strongly recommended.

**BEFORE MANUAL OPERATION**

Unit must be turned off before manual operation.

To operate your unit manually:

- Open the front panel of the indoor unit.
- Locate the MANUAL CONTROL button on the right-hand side of the unit.
- Press the MANUAL CONTROL button one time to activate FORCED AUTO mode.

- Press the MANUAL CONTROL button again to activate FORCED COOLING mode.
- Press the MANUAL CONTROL button a third time to turn the unit off.
- Close the front panel.

**CAUTION**

The manual button is intended for testing purposes and emergency operation only. Please **DO NOT** use this function unless the remote is lost and it is absolutely necessary. To restore regular operation, use the remote control to activate the unit.

---

**CLEANING YOUR INDOOR UNIT**

**WARNING**

**BEFORE CLEANING OR MAINTENANCE ALWAYS TURN OFF YOUR AIR CONDITIONER SYSTEM AND DISCONNECT ITS POWER SUPPLY BEFORE CLEANING OR MAINTENANCE.**

**CAUTION**

Only use a soft, dry cloth to wipe the unit clean. If the unit is especially dirty, you can use a cloth soaked in warm water to wipe it clean.

- **DO NOT** use chemicals or chemically treated cloths to clean the unit
- **DO NOT** use benzene, paint thinner, polishing powder or other solvents to clean the unit. They can cause the plastic surface to crack or deform.
- **DO NOT** use water hotter than 40°C/104°F to clean the front panel. This can cause the panel to deform or become discolored.

---

**CLEANING YOUR AIR FILTER**

A clogged air filter can reduce the cooling efficiency of your unit, and can also be bad for your health. Make sure to clean the filter once every week.

- Lift the front panel of the indoor unit.
- Grip the tab on the end of the filter, lift it up, then pull it towards yourself.
- Now pull the filter out.
- If your filter has a small air freshening filter, unclip it from the larger filter. Clean this air freshening filter with a hand-held vacuum.
- Clean the large air filter with warm, soapy water. Be sure to use a mild detergent.
- Rinse the filter with fresh water, then shake off excess water.
- Dry it in a cool, dry place, and refrain from exposing it to direct sunlight.
- When dry, re-clip the air freshening filter to the larger filter, then slide it back into the indoor unit.
- Close the front panel of the indoor unit.

**CAUTION**

**DO NOT** touch air freshening (Plasma) filter for at least 10 minutes after turning off the unit.
Before changing the filter or cleaning, turn off the unit and disconnect its power supply.

When removing filter, **DO NOT** touch metal parts in the unit. The sharp metal edges can cut you.

**DO NOT** use water to clean the inside of the indoor unit. This can destroy insulation and cause electrical shock.

**DO NOT** expose filter to direct sunlight when drying. This can shrink the filter.

**CAUTION**

**AIR FILTER REMINDERS (OPTIONAL)**

**AIR FILTER CLEANING REMINDER**

After 240 hours of use, the display window on the indoor unit will flash "CL." This is a reminder to clean your filter. After 15 seconds, the unit will revert to its previous display.

To reset the reminder, press the LED button on your remote control 4 times, or press the MANUAL CONTROL button 3 times. If you don’t reset the reminder, the “CL” indicator will flash again when you restart the unit.

**AIR FILTER REPLACEMENT REMINDER**

After 2,880 hours of use, the display window on the indoor unit will flash “nF.” This is a reminder to replace your filter. After 15 seconds, the unit will revert to its previous display. To reset the reminder, press the LED button on your remote control 4 times, or press the MANUAL CONTROL button 3 times. If you don’t reset the reminder, the “nF” indicator will flash again when you restart the unit.

**CAUTION**

- Any maintenance and cleaning of outdoor unit should be performed by a licensed service provider.
- Any unit repairs should be performed by a licensed service provider.

**MAINTENANCE – LONG PERIODS OF NON-USE**

If you plan not to use your air conditioner for an extended period of time, do the following:

- Clean all filters
- Turn on FAN function until unit dries out completely
- Turn off the unit and disconnect the power
- Remove batteries from remote control
- Check for damaged wires
- Check for leaks
- Replace batteries
- Make sure nothing is blocking all air inlets and outlets

**MAINTENANCE – PRE-SEASON INSPECTION**

After long periods of non-use, or before periods of frequent use, do the following:

- Clean all filters
- Check for damaged wires
- Check for leaks
- Replace batteries
- Make sure nothing is blocking all air inlets and outlets
SAFETY PRECAUTIONS

If ANY of the following conditions occurs, turn off your unit immediately!

• The power cord is damaged or abnormally warm.
• You smell a burning odor.
• The unit emits loud or abnormal sounds.
• A power fuse blows or the circuit breaker frequently trips.
• Water or other objects fall into or out of the unit.

DO NOT ATTEMPT TO FIX THESE YOURSELF! CONTACT AUTHORIZED SERVICE PROVIDER IMMEDIATELY!

COMMON ISSUES

The following problems are not a malfunction and in most situations will not require repairs.

<table>
<thead>
<tr>
<th>Issue</th>
<th>Possible Causes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unit does not turn on when pressing ON/OFF button</td>
<td>The Unit has a 3-minute protection feature that prevents the unit from overloading. The unit cannot be restarted within three minutes of being turned off.</td>
</tr>
<tr>
<td>The unit changes from COOL/HEAT mode to FAN mode</td>
<td>The unit may change its setting to prevent frost from forming on the unit. Once the temperature increases, the unit will start operating in the previously selected mode again.</td>
</tr>
<tr>
<td>The indoor unit emits white mist</td>
<td>In humid regions, a large temperature difference between the room’s air and the conditioned air can cause white mist.</td>
</tr>
<tr>
<td>Both the indoor and outdoor units emit white mist</td>
<td>When the unit restarts in HEAT mode after defrosting, white mist may be emitted due to moisture generated from the defrosting process.</td>
</tr>
<tr>
<td>The indoor unit makes noises</td>
<td>A rushing air sound may occur when the louver resets its position.</td>
</tr>
<tr>
<td></td>
<td>A squeaking sound may occur after running the unit in HEAT mode due to expansion and contraction of the unit’s plastic parts.</td>
</tr>
</tbody>
</table>

NOTE: If problem persists, contact a local dealer or your nearest customer service center. Provide them with a detailed description of the unit malfunction as well as your model number.
<table>
<thead>
<tr>
<th>Issue</th>
<th>Possible Causes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Both the indoor unit and outdoor unit make noises</td>
<td>Low hissing sound during operation: This is normal and is caused by refrigerant gas flowing through both indoor and outdoor units.</td>
</tr>
<tr>
<td></td>
<td>Low hissing sound when the system starts, has just stopped running, or is defrosting: This noise is normal and is caused by the refrigerant gas stopping or changing direction.</td>
</tr>
<tr>
<td></td>
<td>Squeaking sound: Normal expansion and contraction of plastic and metal parts caused by temperature changes during operation can cause squeaking noises.</td>
</tr>
<tr>
<td>The outdoor unit makes noises</td>
<td>The unit will make different sounds based on its current operating mode.</td>
</tr>
<tr>
<td>Dust is emitted from either the indoor or outdoor unit</td>
<td>The unit may accumulate dust during extended periods of non-use, which will be emitted when the unit is turned on. This can be mitigated by covering the unit during long periods of inactivity.</td>
</tr>
<tr>
<td></td>
<td>The unit may absorb odors from the environment (such as furniture, cooking, cigarettes, etc.) which will be emitted during operations.</td>
</tr>
<tr>
<td>The unit emits a bad odor</td>
<td>The unit’s filters have become moldy and should be cleaned.</td>
</tr>
<tr>
<td>The fan of the outdoor unit does not operate</td>
<td>During operation, the fan speed is controlled to optimize product operation.</td>
</tr>
<tr>
<td>Operation is erratic, unpredictable, or unit is unresponsive</td>
<td>Interference from cell phone towers and remote boosters may cause the unit to malfunction.</td>
</tr>
<tr>
<td></td>
<td>In this case, try the following:</td>
</tr>
<tr>
<td></td>
<td>• Disconnect the power, then reconnect.</td>
</tr>
<tr>
<td></td>
<td>• Press ON/OFF button on remote control to restart operation.</td>
</tr>
</tbody>
</table>

**NOTE:**
If problem persists, contact Ideal-Air™ technical support. Provide them with a detailed description of the unit malfunction as well as your model number.
<table>
<thead>
<tr>
<th>Problem</th>
<th>Possible Causes</th>
<th>Solution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Poor Cooling Performance</td>
<td>Temperature setting may be higher than ambient room temperature</td>
<td>Lower the temperature setting</td>
</tr>
<tr>
<td></td>
<td>The heat exchanger on the indoor or outdoor unit is dirty</td>
<td>Clean the affected heat exchanger</td>
</tr>
<tr>
<td></td>
<td>The air filter is dirty</td>
<td>Remove the filter and clean it according to instructions</td>
</tr>
<tr>
<td></td>
<td>The air inlet or outlet of either unit is blocked</td>
<td>Turn the unit off, remove the obstruction and turn it back on</td>
</tr>
<tr>
<td></td>
<td>Doors and windows are open</td>
<td>Make sure that all doors and windows are closed while operating the unit</td>
</tr>
<tr>
<td></td>
<td>Excessive heat is generated by sunlight</td>
<td>Close windows and curtains during periods of high heat or bright sunshine</td>
</tr>
<tr>
<td></td>
<td>Too many sources of heat in the room (people, computers, electronics, etc.)</td>
<td>Reduce amount of heat sources</td>
</tr>
<tr>
<td></td>
<td>Low refrigerant due to leak or long-term use</td>
<td>Check for leaks, re-seal if necessary and top off refrigerant</td>
</tr>
<tr>
<td></td>
<td>SILENCE function is activated (optional function)</td>
<td>SILENCE function can lower product performance by reducing operating frequency. Turn off SILENCE function.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Problem</th>
<th>Possible Causes</th>
<th>Solution</th>
</tr>
</thead>
<tbody>
<tr>
<td>The unit is not working</td>
<td>Power failure</td>
<td>Wait for the power to be restored</td>
</tr>
<tr>
<td></td>
<td>The power is turned off</td>
<td>Turn on the power</td>
</tr>
<tr>
<td></td>
<td>The fuse is burned out</td>
<td>Replace the fuse</td>
</tr>
<tr>
<td></td>
<td>Remote control batteries are dead</td>
<td>Replace batteries</td>
</tr>
<tr>
<td></td>
<td>The Unit’s 3-minute protection has been activated</td>
<td>Wait three minutes after restarting the unit</td>
</tr>
<tr>
<td></td>
<td>Timer is activated</td>
<td>Turn timer off</td>
</tr>
</tbody>
</table>
When troubles occur, please check the following points before contacting a repair company.

<table>
<thead>
<tr>
<th>Problem</th>
<th>Possible Causes</th>
<th>Solution</th>
</tr>
</thead>
<tbody>
<tr>
<td>The unit starts and stops frequently</td>
<td>There’s too much or too little refrigerant in the system</td>
<td>Check for leaks and recharge the system with refrigerant.</td>
</tr>
<tr>
<td>Poor heating performance</td>
<td>Incompressible gas or moisture has entered the system.</td>
<td>Evacuate and recharge the system with refrigerant</td>
</tr>
<tr>
<td></td>
<td>The voltage is too high or too low</td>
<td>Install a manostat to regulate the voltage</td>
</tr>
<tr>
<td></td>
<td>The outdoor temperature is extremely low</td>
<td>Use auxiliary heating device</td>
</tr>
<tr>
<td></td>
<td>Cold air is entering through doors and windows</td>
<td>Make sure that all doors and windows are closed during use</td>
</tr>
<tr>
<td></td>
<td>Low refrigerant due to leak or long-term use</td>
<td>Check for leaks, re-seal if necessary and top off refrigerant</td>
</tr>
<tr>
<td>Indicator lamps continue flashing</td>
<td>The unit may stop operation or continue to run safely. If the indicator lamps continue to flash or error codes appear, wait for about 10 minutes. The problem may resolve itself. If not, disconnect the power, then connect it again. Turn the unit on. If the problem persists, disconnect the power and contact Ideal-Air™ technical support.</td>
<td></td>
</tr>
<tr>
<td>Error code appears in the window display of indoor unit:</td>
<td>• E0, E1, E2…</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• P1, P2, P3…</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• F1, F2, F3…</td>
<td></td>
</tr>
</tbody>
</table>

NOTE:
If your problem persists after performing the checks and diagnostics above, turn off your unit immediately and contact Ideal-Air™ technical support.
DISPOSAL GUIDELINES

This appliance contains refrigerant and other potentially hazardous materials. When disposing of this appliance, the law requires special collection and treatment. **DO NOT** dispose of this product as household waste or unsorted municipal waste.

When disposing of this appliance, you have the following options:
- Dispose of the appliance at designated municipal electronic waste collection facility.

**SPECIAL NOTICE**

Disposing of this appliance in the forest or other natural surroundings endangers your health and is bad for the environment. Hazardous substances may leak into the ground water and enter the food chain.
GLOSSARY OF TERMS

A/C – Air conditioning also referred to as A/C. A system or device for reducing the temperature and humidity, in a space.

AHAM – Acronym for Association of Home Appliance Manufacturers. AHAM produces the official rating for dehumidifiers.

BTU – British Thermal Unit. A single BTU is the amount of energy required to cool or heat a pound of water one degree Fahrenheit.

Condenser – The unit used to condense a substance from a gaseous state to liquid by cooling it. Condensers are generally recognized as heat exchangers. In the case of air conditioners they extract the inside heat from the interior of the air conditioner to the outside air. Often referred to as “the outdoor unit.”

Dehumidifier – Also called, dehums. Dehumidifiers remove humidity and are used to keep a rooms humidity levels in check. Maintaining correct humidity will ensure a healthy crop. Too much humidity will cause molds, rot and devastate your crop.

Digital Inverter Compressor – A digitally controlled compressor that converts AC voltage to DC voltage to control compressor speed. The inverter allows precise throttle control of the conditioning unit based on the load or need. Inverter units are quieter, more efficient and last longer.

Ductless Mini-Split – An air conditioner or heat pump that requires no duct work to function. The unit hangs on the wall or ceiling and cools or heats the surrounding area.

Evaporator – The indoor portion of the heat pump or air conditioner. In a mini-split system this hangs on the wall or ceiling and provides the heating or cooling of the space.

H/P – Heat Pump. A unit that can operate as both an air conditioner or a heater. When it’s cold outside a heat pump extracts the outside heat and transfers it inside. When it’s warm outside, it reverses directions and acts like an air conditioner, removing heat. A heat pump moves heat instead of generating it, giving you more energy efficiency.

HSPF – Heating Seasonal Performance Factor. The greater the number/rating the more efficient the heating. A 10 HSPF, for example is a very good rating.

Humidifier – Humidifiers use water to put humidity in the growing space. Many plants we grow indoors are accustomed to growing outdoors in tropical areas where humidity is high. Also certain parts of the country are drier than others so you will need to add humidity.

Line Set – Insulated copper tubing used to connect the evaporator and condenser. The refrigerant travels back and forth through the line set between the evaporator and condenser to create either cooling or heating.

R-410 – A type of refrigerant. Unlike alkyl halide refrigerants, R-410A (which contains only fluorine) does not contribute to ozone depletion. Because of that attribute it’s preferred and used more broadly instead of R-22 which are phased out. R-410 refrigerants allow for higher SEER ratings therein reducing power consumption and improving unit efficiency.

SEER – Seasonal Energy Efficiency Ratio. The greater the SEER rating, the more efficient the cooling system. The minimum SEER rating allowed by the Federal Government is 14.

Ton – The size of air conditioning unit (heating or cooling) is common referred to in “tons”. A one ton unit, for example, is 12,000 BTU’s. A two ton, 24,000 BTU’s, etc. This was arrived at using a standard of how long it would take to melt ice. A one ton unit takes 12,000BTU’s of heat one hour to melt a ton of ice.

VFD – Variable Frequency Drive. The VFD is an electrical device that’s used to control the speed and torque of an air conditioning motor, like those used in an inverter compressor.

NOTES

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IMPORTANT

Product not working properly?

DO NOT return this product to the store where you purchased it.

Contact Ideal-Air™ support directly at support@ideal-air.com or call 1-877-943-3251

For answers to most common questions and a complete technical support library please visit www.ideal-air.com

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