AIR CONDITIONING 101:

What is a BTU and why is it important?

BTU stands for British Thermal Unit, which is a measuring unit for energy. BTUs indicate the heating and/or cooling power of an appliance. The higher a device’s BTUs, the larger the surface that can be cooled or heated. Before choosing an air conditioner, it’s important to check its BTU/h to ensure the right cooling power.

What’s the difference between a portable air conditioner and other types of air conditioners?

Generally, air conditioners can be divided into three categories:

- **Room Air Conditioners** [Window Air Conditioners or Portable Air Conditioners]: Window units are typically installed in a window for the season. Portable air conditioners are exhausted through a window and can be wheeled from room to room.
- **Split Air Conditioners**: Split systems are equipped with one or more internal units fixed to the wall, as well as an external one.
- **Central Air Climate Control Systems**: Central systems are designed to treat the air of an entire home or building.

Both split systems and central systems require professional installation and are more expensive to purchase than room air conditioners.

PORTABLE AIR CONDITIONERS

What are the pros and cons of a portable air conditioner?

Portable air conditioners are extremely versatile units. Owners choose portable ACs because of the ease of installation. After locating the AC in your selected room, installation takes minutes and no heavy lifting and balancing a unit in the window. Another benefit is portability. Over half of owners report moving their portable AC from room to room saving money on multiple units. And a favorite is that the view and use of the window is not lost. As less than 4” is needed in your window space, you keep your view. And if it cools down and you want to open your windows, simply remove the window kit.

However, the unit needs to be near a window or French door so its exhaust hose can discharge hot and humid air outside. Best with double hung and sliders, the installation can be more challenging with casement windows. If needing to carry upstairs for initial installation, the air conditioner is heavy, and this can be difficult for some owners.

Portable air conditioners are a great solution when you are on one floor and can easily move your AC from room to room but do require a nearby window to vent exhaust air.

What is required when using a portable air conditioner?

Generally, portable air conditioners require three things: space for the unit, a power outlet, and an external window – or a hole in the glass or wall – to allow it to discharge hot air.
BEFORE YOU BUY: CHOOSING THE BEST PORTABLE AC FOR YOUR HOME

How do I choose which portable air conditioner is best for cooling?

To determine the ideal BTU/h for your room, first assess how many BTU/h are necessary to cool the desired area. The PACAN125HPEKC is good for rooms up to 480 square feet.

The BTU/h calculation is given by a series of valuations on the type of area to be cooled. In addition to the square footage of your room, other important factors to consider include:

- Ceiling Height: Square-footage coverage is based on standard 8-foot ceilings. If you have higher ceilings, choose a higher BTU unit for the area.
- Facing Direction/Sun Exposure/Number of Windows: Rooms receiving lots of sunlight will need higher BTUs.
- Number of people typically in the area to be cooled: For a busy family room/living room with 3-4 people, choose a unit with higher BTUs.

INSTALLATION:

Do portable air conditioners require installation?

Not a permanent installation like other solutions or semi-permanent like Window ACs. However, to exhaust the warm air, the air conditioner is equipped with a window kit for use with almost any window – double hung or sliding work best but owners have also used with casement with some adjustments. Alternatively, for more permanent use of the air exhaust tube, a hole can be made in a wall or in the glass.

How does the window kit work?

The window kit for this air conditioner fits windows from 20” to 76” wide. Be sure the window is close to an outlet with a 3-prong plug. After setting the kit in place, close the window against the kit; a layer of foam seals it off from the air outside. Then, fit the exhaust hose through a small cutout in the kit and you’re all set. Installation is quick and simple, making it easy to transport your portable air conditioner from room to room.

What happens if the hose is not long enough to reach the window?

You cannot lengthen the exhaust hose without reducing cooling power. It is typically about 4 feet in length. Before buying, ensure you have sufficient space to place the portable air conditioner near a window or glass door.

OPERATION:

I’ve turned the unit on and it’s not cooling my room. Why isn’t compressor working?

Your air conditioner is designed to turn the air compressor on after the unit has been running for 3 minutes. Engineered to protect the compressor, this safety feature allows the contents
time to settle in the event the air conditioner has been moved or tipped over. The delay is common amongst all portable AC brands.

Once warm-up is complete, you will hear the compressor come on.

**What is the noise level on Portable ACs?**

De’Longhi portable ACs range from 48-60 db(A) depending on model and speed. The higher the BTUs, the higher the sound power. Factors such as fan speed will impact noise level. One quick way to lower the noise is to drop the fan speed down to low or medium. This is a great solution on a room that’s already cooled.

**What are Decibels, or dB(A)?**

They are the international measuring unit for noise.

- 40 dB(A): typical noise level inside a library
- 60 dB(A): the sound power of normal conversation
- 120 dB(A): the noise level of a plane during takeoff

**Why do I hear a clicking noise when the unit is operating?**

The clicking noise is simply the compressor/condenser adjusting to external temperatures.

**HEATING MODE**

My air conditioner shows 3810 watts in heating mode. Does that mean it consumes 3810 watts of energy?

No. This is a measure of the heating capacity not electricity usage. The electrical usage is calculated at Amps x Voltage as shown on each appliance’s data label. At max performance, De’Longhi portable ACs use approximately 1200 to 1300 watts of electrical power.

**TROUBLESHOOTING**

Air conditioner is not cooling the room properly.

- Check to make sure you are in the Cooling mode. G on the below control panel image.
• It will take 3 minutes approximately for the cooling system to kick in after turning on. This protects the cooling system. You will not immediately feel the cooling effect. After the system comes on, audible change in performance, you will begin to feel the cooling power.

• Give the air conditioner some time to cool, especially on a hotter day. Instant relief close to the machine is possible but on hotter days, it will take longer for the AC to cool the room. Also, cover windows that are getting direct sun to prevent solar heating. Close any open windows or doors to keep cooled air in the room.

Air conditioner does not start.

• Is it securely plugged into the outlet?

• Check your electrical service. Is there a reliable current?

• Has the internal safety device been tripped?

Air conditioner works only for a short time.

• Are there bends or kinks in the air exhaust hose?

• Are there any obstructions preventing the air from being discharged?

Air conditioner is leaking water.

• Is the air conditioner level and stabilized?

• Is the rubber stopper located in the drainage port on the bottom rear of the unit missing or loosely inserted?

• Is there any error message that the water tray is full, if so, empty the water tray by removing the rubber stopper and letting excess water drain into a shallow pan.

Air conditioner produces an unpleasant odor.

• Check the dust filter. Is it clogged or dirty? Clean the filter by rinsing under water and air dry.

If any of these solutions do not work, or you have a different problem, please reach out to De’Longhi at our toll free number (For US 1-800-322-3848; For Canada 1-888-335-6644) for assistance or visit our website www.delonghi.com.