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How do you control your LG Ductless system?



New HVAC control technology is prevalent today and is allowing more choices for users of advanced inverter controlled comfort systems. Since the introduction of LG ductless split systems in the US, there have been requests from qualified installers and end users for more conventional control options, while at the same time these third party control systems also have advanced greatly in terms of user parameters and integration with home automation, security systems and offsite remote reporting and control. The LG company, as a leader in global commercial and consumer electronics and air conditioning understands that while we produce a Smart AC control system for smartphone and IOS applications for proprietary control of our units (LG Smart AC WLAN PCRCUDT3), there are more personal decisions being made with manufactures such as Honeywell™, Nest™ and Ecobee™.



Let's look at the facts. While LG has been successful with the introduction of the Smart AC WLAN for many of our single zone models through 36 M BTU, these require a home wireless router system and smartphone/IOS app to operate. But what if you already have a consumer

who is in love with a Nest learning thermostat? We at LG recognize it's a race of innovation by others to integrate control of home comfort systems as the largest contributor to home comfort as well as the largest energy consumer in the typical home.

LG Dry Contact for Third Party Thermostat PDRYCB300



At the AHR show in Chicago January 2015, LG launched its new dry contact for third party thermostat to great acceptance. We believe it is a first to market solution for building a bridge for external control of our units by other devices. Through a small electronic control module, we now can accept inputs for call for heat/cool, fan and on/off. Additionally the module can have inputs for occupancy sensors and report alarms for specific reasons.

How does it work?

Let's use Honeywell Wi-Fi VisionPRO 8000™ as an example. By adding the PDRYCB300 interface, the installer plugs the LG included 30" cable into the multi or single indoor inverter air handling unit control board. We have a jig waiting for the cable. The 4" x 3" x 1-3/8" thin plastic case is color matched for the white LG indoor units but can be located behind walls or out of site with ducted and cassette units. Wire terminals are ready for the usual thermostat wire connections. Since the PDRYCB300 is a dry contact and the VisionPRO™ requires power to operate, an additional 24V power supply must be added. Once the circuit is powered and the controller is properly set up, the thermostat now dictates the call for heat/cool/fan/off. I hear you asking..."But wait, LG provides their own wired... and wireless controllers, what does this mean?"

Yes it is true that some things will change. For instance, if you are using the vane control function for a cassette unit from its factory included wireless controller, you won't have that function available on the VisionPRO™. Likewise the healthy dehumidification mode will not be available from the thermostat. The user will still have these control features available if they use the wireless device that came with the LG system. Last call dictates the run programming for the indoor unit. So if you normally operate the LG unit from the VisionPRO™, you still can temporarily over-ride the VisionPRO with the wireless controller. Ducted units have wired controllers, so if the VisionPRO™ thermostat is applied, there can be no over-ride in those

cases. Additionally, system fault codes cannot be displayed on third party thermostats. Those fault codes would remain available for reading at the outdoor unit as always.

The advanced LG inverter system operates with compressor frequency modulation by many inputs of information including incoming/exiting refrigerant pipe temperatures and indoor/outdoor air temperatures. So if one applies a simple on/off signal to thermo input from the VisionPRO™, the heat pump inverter system continues to adjust its operation just like before. Now you will be interpreting the air temperature at the controller location, not from the return air sensor in the indoor unit.

Second stage and Wi-Fi, oh my!

Due to the thermostat, specific options are available now that in the past were not. For instance, your customer wants to monitor and adjust heating temperatures through Wi-Fi while on vacation, or you want to integrate the LG Inverter heat pump into a primary/secondary heating control package. You are now able to do these things and are limited only by the third party control options. Wi-Fi is not a control option in many secured facilities such as banks. Proprietary wireless networks such as Honeywell RedLINK™ are now available and therefore you have more LG installation options.

If you have questions please reach out to LG Technical Support or our qualified technical sales teams. Embrace the new connectivity options today, your customers are!

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