Table of Contents

1.0 Overview ................................................................................................................................................. 1
2.0 LG PDRYCB300 .......................................................................................................................................... 1
  2.1 System Topology .................................................................................................................................. 1
  2.2 Wiring Diagrams .................................................................................................................................... 2
  2.3 Design Considerations ......................................................................................................................... 5
3.0 LG PDRYCB500 .......................................................................................................................................... 6
  3.1 System Topology .................................................................................................................................. 6
  3.2 Wiring Diagram .................................................................................................................................... 6
  3.3 Implementing LG PDRYCB500 into a HomeWorks QS System .............................................................. 7
    3.3.1 Adding PDRYCB500 to a HomeWorks QS Database ....................................................................... 7
    3.3.2 Editing the HVAC Zone .................................................................................................................. 8
    3.3.3 Assigning a Palladiom Thermostat to Control the HVAC Zone .................................................... 9

1.0 Overview

Lutron Electronics and LG, a leading supplier of Variable Refrigerant Flow (VRF) technology, have integrated the sleek, intuitive design of the Palladiom Thermostat for control of LG Systems. This integration is achieved by using a Palladiom Thermostat, a Lutron Fan Coil Unit (FCU) Controller (myRoom) or Palladiom HVAC controller (HomeWorks QS), and an LG Dry interface. This integration is available for Lutron projects in the United States.*

• LG PDRYCB300 with a Lutron FCU controller or Palladiom HVAC controller and a Palladiom thermostat
• LG PDRYCB500 with a HomeWorks QS Palladiom thermostat

2.0 LG PDRYCB300

2.1 System Topology

The system includes a Palladiom thermostat with the FCU controller (SMC55-HOSP) or Palladiom HVAC controller (SMC55-HWQS) connected to the LG Dry Contact interface.
2.2 Wiring Diagrams

3-Speed Fan
Heat and Cool

Slide to “VOLT”

Note: Do not input voltage signal in “NON VOLT” setting mode, otherwise it will cause serious damage.

Continued on next page...
2.2 Wiring Diagrams (continued)

3-Speed Fan
Heat Only

Note: Do not input voltage signal in "NON VOLT" setting mode, otherwise it will cause serious damage.

Continued on next page...
2.2 Wiring Diagrams (continued)

3-Speed Fan
Cool Only

Note: Do not input voltage signal in "NON VOLT" setting mode, otherwise it will cause serious damage.
2.3 Design Considerations

- In heat only or cool only applications, the FCU controller and Palladiom HVAC controller must be configured for heating only or cooling only.
- The Palladiom HVAC controller must be configured to control FCUs.
- The PDRYCB300 interface should be supplied by your local LG distributor.
- The FCU controller must be model SMC55-HOSP from Lutron.
- The Palladiom HVAC controller must be model SMC55-HWQS from Lutron.
- Use one PDRYCB300 interface per LG VRF system controlled by the Palladiom thermostat.
- Power supply is required and field supplied by others.
- Use 18 AWG (1.0 mm²) wire between PDRYCB300 and Lutron controller, maximum 500 ft (152 m).
- Lutron myRoom systems and Palladiom thermostat must be programmed by a trained Lutron service engineer or an authorized distributor.
- Lutron HomeWorks QS systems and Palladiom thermostat must be programmed by a qualified system programmer.
- A trained LG HVAC professional may change the PDRYCB300 configurations based on user preference.
3.0 LG PDRYCB500

3.1 System Topology
The system includes a Palladiom thermostat connected to the LG Dry Contact interface.

3.2 Wiring Diagram
3.3 Implementing LG PDRYCB500 into a HomeWorks QS System

3.3.1 Adding PDRYCB500 to a HomeWorks QS Database

To add LG equipment to the database (HomeWorks QS software version 12.0 or newer required), go to the design tab of the software and use the drop-down menu to select equipment. Next, find the 3rd Party HVAC device in the toolbox and click “+” to add the device using HomeWorks QS software version 12.0 or newer.

Note: The default toolbox does not contain this device by default, so it is necessary to edit or create a toolbox to include the 3rd Party HVAC device.

Once the 3rd Party HVAC control has been added to the Equipment Locations area, provide a name for the HVAC control and select LG as the Manufacturer.

When adding the 3rd Party HVAC device, a zone is automatically added by default to the area where the LG interface is located. To move that HVAC zone to the area where the PDRYCB500 is located, cut/paste the HVAC zone to the desired area.
3.3.2 Editing the HVAC Zone

To edit a 3rd Party HVAC Zone in the database, go to the design tab of the HomeWorks QS software and use the drop-down menu to select loads. Next, find the HVAC Zones tab on the right-hand side of the screen.

![Image of HVAC Zone tab](image)

For each HVAC zone added, provide a Zone Name, select Operating Modes, and select the Fan Speeds that are applicable. Unchecked modes will be hidden when using the Lutron Connect app. It is important to only check the modes that are necessary so that the app is simpler for the user. Choosing a user-friendly zone name is important for the sake of simplicity.

![Image of HVAC Zone details](image)

**UID** reflects the indoor unit address. All indoor units must be provided with addresses depending on specific AC system type. This can be done manually by the integrator. Addresses should be set by a HVAC contractor and the integrator should acquire the addresses from the contractor.
3.3.3 Assigning a Palladiom Thermostat to Control the HVAC Zone

The Palladiom thermostat is a QS wired link device which can act as a remote thermostat control. It uses one address of the 99 available addresses on a QS link. There can be up to 32 Palladiom thermostats per QS link. When using a Palladiom thermostat with LG equipment, the sensor within the Palladiom thermostat is not used by the system.

The Palladiom thermostat can be added to the project by navigating to design > controls and selecting the desired item from the toolbox. If the items do not show in the default Temperature tab, they can be added by clicking Edit Toolbox.

Select the correct device location from the Area Tree. Hover over the control and click “+” to add the control to the area. Click Assign... under the HVAC Controller field.

Click Assign to assign the controller to the Palladiom thermostat.
3.3.3 Assigning a Palladiom Thermostat to Control the HVAC Zone (continued)

Navigate to design > equipment and select the LG controller to assign to the Palladiom thermostat. Click Assign... under the Assigned Devices field.

Click Assign to assign the Palladiom thermostat to the LG controller.

The name of the remote temperature control will now be visible in the Assigned Devices field.
Lutron, HomeWorks, and Palladiom are trademarks of Lutron Electronics Co., Inc., registered in the U.S. and other countries. myRoom and Lutron Connect are trademarks of Lutron Electronics Co., Inc.

LG is a registered trademark of LG Electronics Inc.

Lutron Contact Numbers

WORLD HEADQUARTERS
USA
Lutron Electronics Co., Inc.
7200 Suter Road
Coopersburg, PA 18036-1299
TEL: +1.610.282.3800
FAX: +1.610.282.1243
support@lutron.com
www.lutron.com/support

North & South America
Customer Assistance
USA, Canada, Caribbean:
1.844.LUTRON1 (1.844.588.7661)
Mexico:
+1.888.235.2910
Central/South America:
+1.610.282.6701

EUROPEAN HEADQUARTERS
United Kingdom
Lutron EA Limited
125 Finsbury Pavement
4th floor, London EC2A 1NQ
United Kingdom
TEL: +44.(0)20.7702.0657
FAX: +44.(0)20.7480.6899
FREEPHONE (UK): 0800.282.107
Technical Support: +44.(0)20.7680.4481
lutronlondon@lutron.com

ASIAN HEADQUARTERS
Singapore
Lutron GL Ltd.
390 Havelock Road
#07-04 King’s Centre
Singapore 169662
TEL: +65.6220.4666
FAX: +65.6220.4333
Technical Support: 800.120.4491
lutronsea@lutron.com

Asia Technical Hotlines
Northern China: 10.800.712.1536
Southern China: 10.800.120.1536
Hong Kong: 800.901.849
Indonesia: 001.803.011.3994
Japan: +81.3.5575.8411
Macau: 0800.401
Taiwan: 00.801.137.737
Thailand: 001.800.120.665853
Other Countries: +65.6220.4666