

Applying LG Central Controllers and Gateways to Single and Multi Zone Duct-Free Equipment

Model number: PMNFP14A1

PI-485 for Outdoor Unit

Control LG Duct-Free Split Systems with LG Central Controllers including AC Smart, ACP, AC Ez, or a BMS via a BACnet® or LonWorks® Gateway.

Note: Please contact your LG sales representative or visit mylgvac.com to view the complete compatibility list.

The following guide lines are intended to help in ensuring proper installation of Single and Multi Zone Duct free equipment with LG Central Controller and Gateways. It is not intended to replace product manuals or replace national, state, or local codes.

Installation work must be performed in accordance with national, state, and local code by an individual and/or entity that holds a current government issued license that authorizes the individual and/or entity to perform the work in the state where the System resides.

Installation Considerations:

- Follow mounting, wiring instructions and safety precautions in manuals
- Mounting of PI-485 in single/multi-zone ODU
- Adding DFS units to an existing system
- Combining DFS units with a Multi V system
- Multi V ODU's have built in PI-485

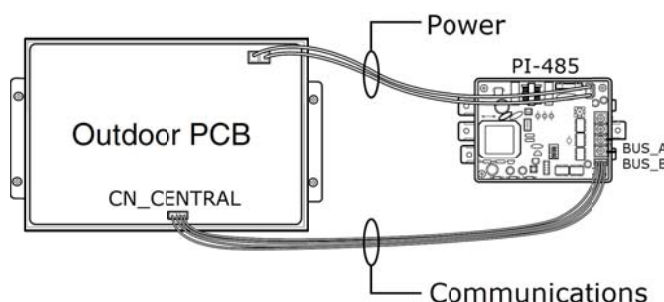
PI-485

Installation Considerations:

- QTY. (1) PI-485 required per ODU
- Max. number of IDU's per PI-485: 64
* Max. number of IDU's per ODU is dependent on connected system

To Connect the PI-485 with the Outdoor Unit:

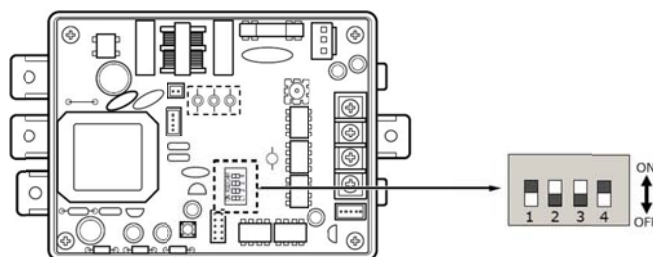
1. Disable power to System
2. Connect CN_OUT on the PI-485 to the CN_CENTRAL on the ODU PCB
3. Connect BUS_A and BUS_B on the PI-485 to the LG Central Controller or Gateway
4. Select proper DIP Switch configuration (below)
5. Connect CN_PWR on the PI-485 to the Outdoor Unit PCB Power Connector
6. Restore Power to the System



Factory supplied 32" communication and power cabling for connecting PI-485 to the ODU included

PI-485 DIP Switch configuration:

1. Set Dip Switches 1 and 4 to ON, all others should be off
2. Press the Reset button after changing Dip Switch settings

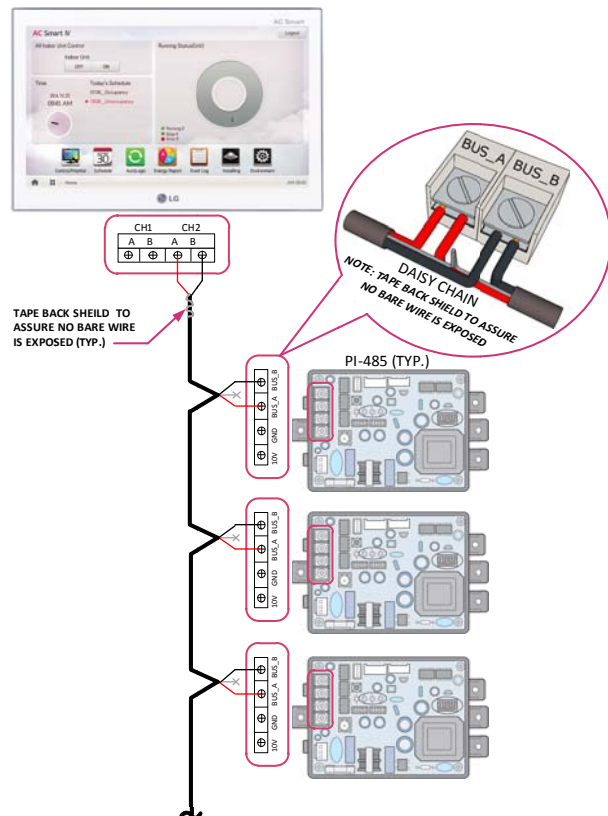


AC Smart IV and AC Smart BACnet

Installation Considerations:

- 24VAC power required
- Touch screen & web browser user interface
- Maximum number of Indoor Units: 128
- Maximum number of channels:
 - CH1 (Modbus)
 - CH2 (LGAP)
- Maximum nodes per channel: 32
 Node = ODU, Slave Central Controller, ERV
(1) LGAP Channel x (32) nodes = (32) total nodes
 - Single zone = 1 node
 - Multi F/Multi F Max = 1 node
 - Multi V (Master) = 2 nodes
 - ERV = 1 node
 - Slave Central Control = 1 node

Example: (8) Dual Chassis Multi V ODU's + (1) Slave CC
 + (8) Multi F ODU's = (25) nodes



Communication Wiring:

- Maximum wiring length not to exceed 3,280 ft. (end to end)
- #18-2 AWG, stranded, shielded copper cable/PVC or vinyl jacket
- Daisy chain 'CH' A and B terminals on Central Controller/Gateway to BUS_A and BUS_B on PI-485
- Single point ground only. Ground at chassis of last ODU (DO NOT ground to GND terminal on PI-485)

ACP IV and ACP Gateway

Installation Considerations:

- 24VAC power required
- Web browser user interface
- Maximum number of Indoor Units: 256
- Maximum number of channels:
 - CH1 ~ CH4 (LGAP)
 - CH5 ~ CH6 (Modbus)
- Maximum nodes per channel: 32
 Node = ODU, Slave Central Controller, ERV
(4) LGAP Channels x (32) nodes = (128) total nodes
 - Single zone = 1 node
 - Multi F/Multi F Max = 1 node
 - Multi V = 2 nodes
 - ERV = 1 node
 - Slave Central Control = 1 node

Example: (8) Dual Chassis Multi V ODU's + (1) Slave CC
 + (8) Multi F ODU's = (25) nodes

