

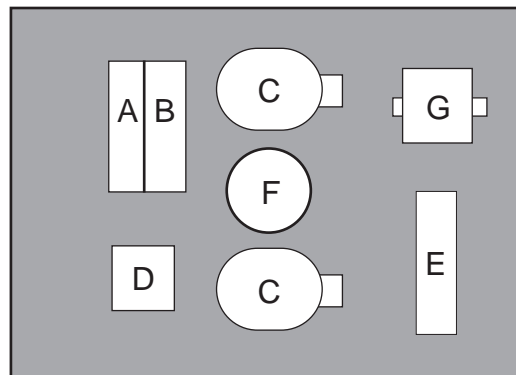
# Setting up your PL DSK v2.2 Evaluation Boards



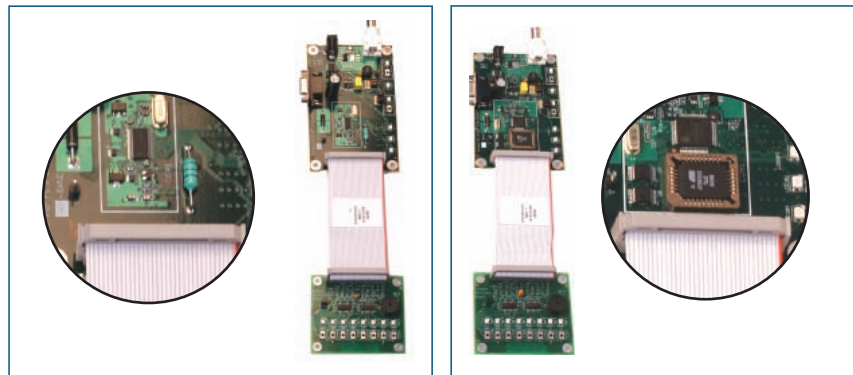
## Getting started

1. You should first make sure that the PL DSK v2.2 includes the following items:

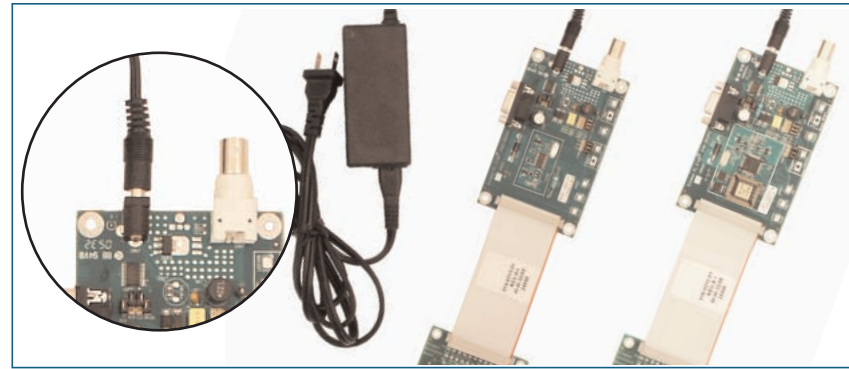
- A. One PL 3150<sup>®</sup> Evaluation Board
- B. One PL 3120<sup>®</sup> Evaluation Board
- C. Two Power Line Power Supplies
- D. Two MiniGizmos
- E. Two Ribbon Cables
- F. One PL Development Support Kit CD
- G. Ten samples of the PL 3120 Power Line Smart Transceivers, and ten samples of the PL 3150 Power Line Smart Transceivers



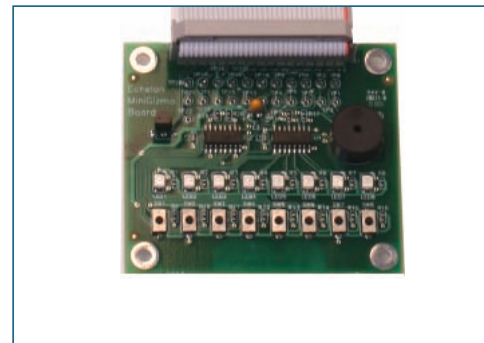
2. Next, use ribbon cables to connect each MiniGizmo to the PL 3120 and PL 3150 Evaluation Boards.



3. Connect the Power Supply to PL Evaluation Boards, and then connect the Power Supply to a power source.



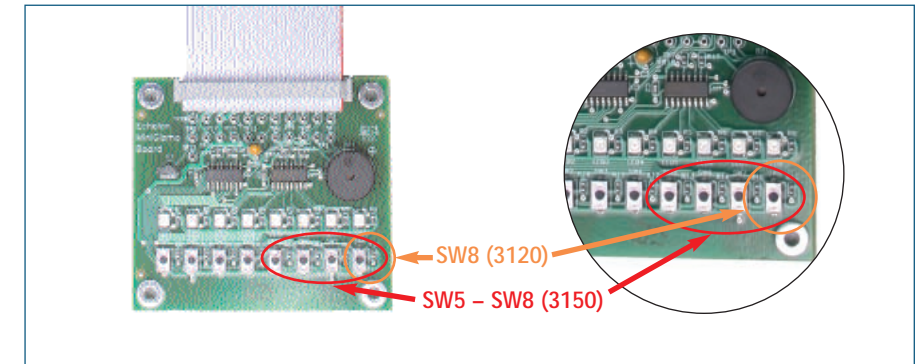
4. You can use the push buttons and LEDs on each MiniGizmo to test the ability of the PL Evaluation Boards to communicate over the power line circuit.



5. After you plug in the power supplies, LED1 will begin flashing, indicating that the Evaluation Board has entered CENELEC configuration mode. If LED8 is on, then the CENELEC access protocol is enabled. If LED8 is off, CENELEC is disabled. You can press the SW8 button to enable or disable CENELEC. When you have made a selection, press the SW1 button to confirm your selection and exit CENELEC configuration mode. You will not be able to perform any network operations with the Evaluation Board until you have made a selection and exited CENELEC configuration mode. See the *Mini EVK User's Guide* for more information on the CENELEC access protocol.

6. Connect push buttons on the PL 3120<sup>®</sup> Evaluation Board to LEDs on the PL 3150 Evaluation Board by pushing the **Connect** button (SW5 – SW8 on the 3150 Evaluation Board or SW8 on the 3120

Evaluation Board) on either board, then the **Connect** button on the other board, and then pressing **Connect** button on the first board again.



7. In addition to testing the PL Evaluation Boards with the MiniGizmo buttons and service button, you can use the PL Technology Evaluation Kit with a custom application. You can either use the NodeBuilder<sup>®</sup> tool or Mini EVK PL-20 to create a custom Neuron<sup>®</sup> C application and then download it into the evaluation board. Please refer to *NodeBuilder User's Guide* or *Mini EVK User's Guide* for more information on developing custom applications. More information on programming and coupling circuits for Power Line Smart Transceivers can be found in the PL 3120/PL 3150/PL 3170 Power Line Smart Transceiver Data Book.

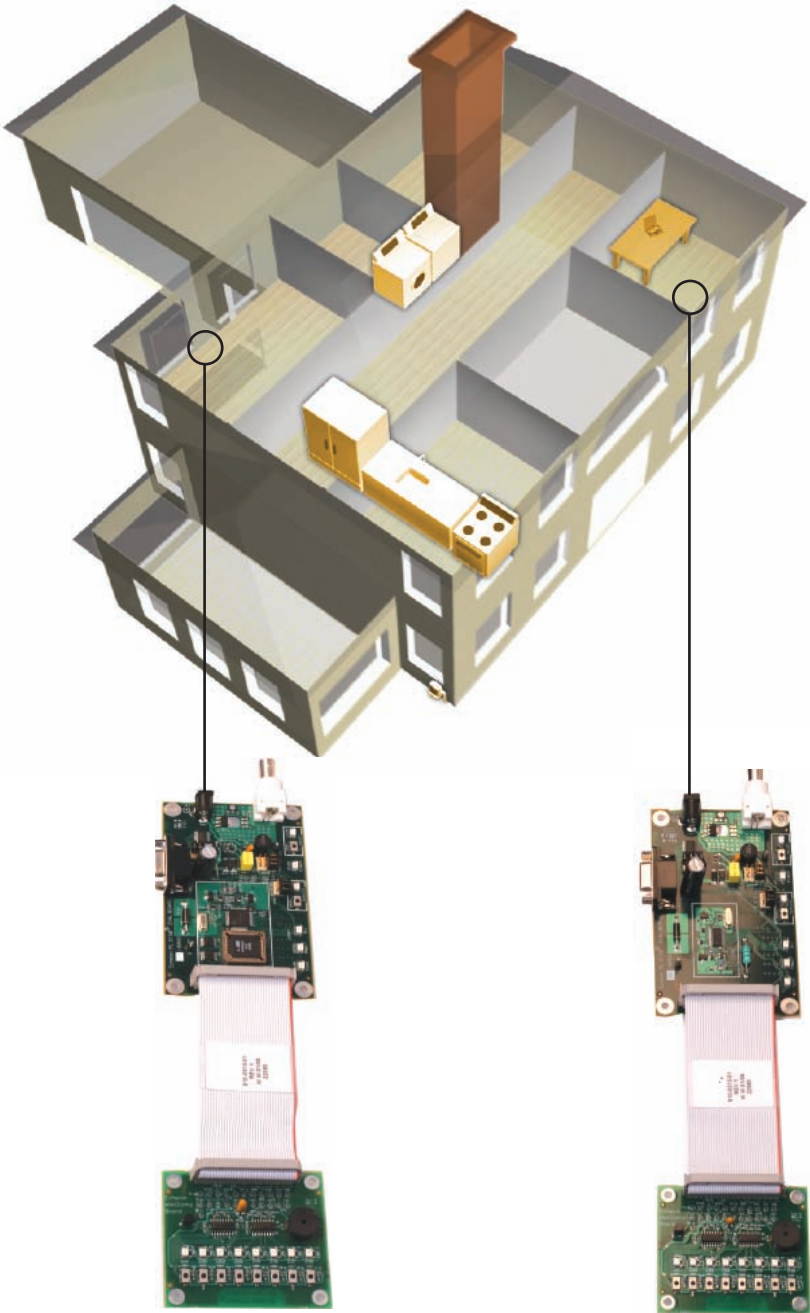
**You can download all the guides mentioned above from Echelon's Web site at [www.echelon.com](http://www.echelon.com).**



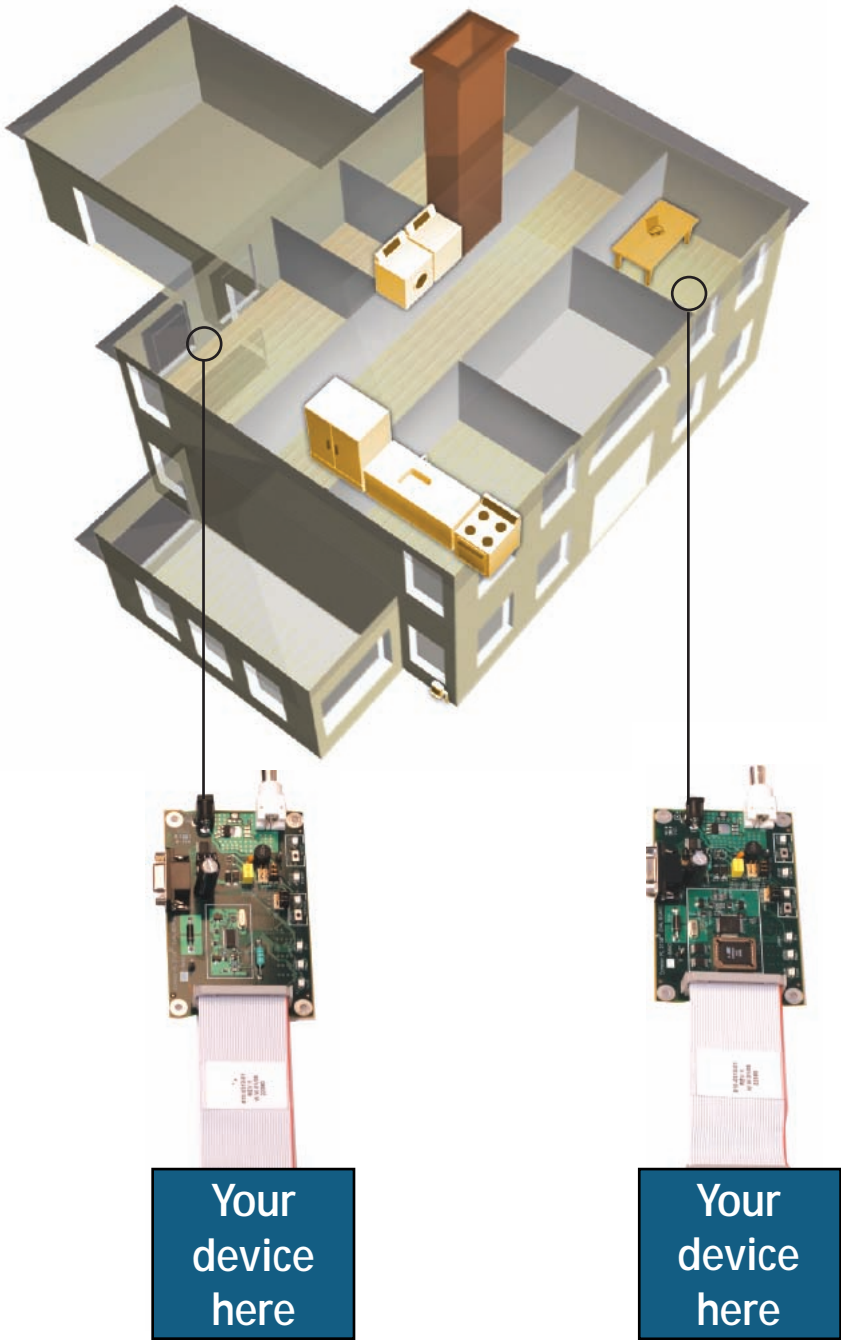
# Typical Usage Scenarios



Preloaded Application (with MiniGizmo)



Customer Loaded Application (with NodeBuilder® tool)



Note: For demonstration purposes both PL Evaluation Boards should be on the same electrical phase.