This section provides the following information:

- Output Device Basics
- Wiring the 4204 relay module
- Wiring the 4300 transformer
- Programming the 4204 relay module
- Programming output devices
- Programming relay voice descriptors

**Output Device Basics**

Relays and Powerline Carrier devices (i.e., X-10 brand devices) are programmable switches that can be used to perform many different functions. They can be used to turn lights on and off, control sounders, or for status indications. In this system, each device must be programmed as to how to act (ACTION), when to activate (START), and when to deactivate (STOP). Each of these is described in *Programming Options Defined*, later in this section and in the programming procedure (#93 Relay Programming mode) provided at the end of this section.

The system supports a total of 16 relays (provided by 4204 Relay modules) and/or Powerline Carrier devices. Each 4204 module provides 4 relays with Form C (normally open and normally closed) contacts.

Powerline Carrier devices are controlled by signals sent through the electrical wiring at the premises via a 4300 transformer. Therefore, if using Powerline Carrier devices, a 4300 transformer *must* be used in place of the regular system transformer.

---

**Wiring the 4204 Relay Module**

1. Set the 4204 DIP switches for a device address between 01-15 that is not being used by another device (keypads, RF receivers, etc.). If using more than one module, each module must be set to a different address.

   The relay module will not operate until the device address you have chosen is enabled in the control's Device Programming mode.

2. Connect the 4204 module(s) to the control's keypad terminals (6, 7, 8, and 9). Use the flying lead cable supplied with the relay module when mounting it in the control's cabinet. Use standard 4-conductor twisted cable when mounting the 4204 outside the cabinet.

3. Home run each 4204 back to the panel. The maximum wire run length from the panel to the 4204 must not exceed:

<table>
<thead>
<tr>
<th>Wire Gauge</th>
<th>Maximum Length</th>
</tr>
</thead>
<tbody>
<tr>
<td>#22</td>
<td>125 feet</td>
</tr>
<tr>
<td>#20</td>
<td>200 feet</td>
</tr>
<tr>
<td>#18</td>
<td>300 feet</td>
</tr>
<tr>
<td>#16</td>
<td>500 feet</td>
</tr>
</tbody>
</table>
Wiring the 4300 Transformer

Powerline Carrier devices (such as X-10, ACT, Leviton) are either plugged into standard AC outlets or wired into the AC electrical system by a licensed electrician, depending on the type of device used. They respond to "on" and "off" commands sent from the panel, through the 4300 transformer, to the receiving devices. Connect the 4300 transformer as follows:

1. Run a 6-conductor cable between the 4300 interface and the panel. Splice this cable to a 4142TR cable as shown in the diagram below. Note that the white and yellow wires of the 4142TR must be spliced together.

2. Set the proper House and Unit Codes for each device following the instructions provided with each device. Note each device’s setup, as these codes will be used to program the devices later.