



Switch 1

Switch 2

Switch 3

UNDERSTANDING THE BASICS

This first section provides an explanation of the following concepts using graphics and text:

1. Getting electricity from the power plant to you;
2. Understanding wiring diagrams and symbols;
3. Identifying wires by name and function;
4. Visualizing the grounding "network" on a farmstead;
5. Electrical wiring pretest (10 questions).

CIRCUIT CONNECTIONS & PROCEDURES

1. Connecting Receptacles
 - End-of-run receptacle
 - Middle-of-run receptacle
2. Single-Pole Switches
 - Middle-of-run switch
 - Switch loop
3. Three-Way Switch Circuits (Shows three different layouts)
 - Source-Light-Switch-Switch
 - Source-Switch-Switch-Light
 - Source-To-Center
4. Three-Way and Four-Way Circuits
5. Calculating Conductor and Box Sizes

INSTALLING CIRCUITS IN BUILDINGS

1. Bathroom (residential)
2. Machine Storage (commercial)
 - Receptacle outlets
 - Lighting (3-way)
3. Shop (commercial)
 - Lighting (3-way & 4-way)
 - Welder
 - Receptacle circuit in conduit
4. Dairy Barn (agricultural)
 - Stray voltage contact points
 - Proper wiring materials