



Electrical Wiring Kit

Quick Start Guide

The Electrical Wiring Kit is made up of a Wall Panel Demonstrator and Assessment Kit to teach students proper electrical wiring techniques while giving instant assessment and corrective feedback.

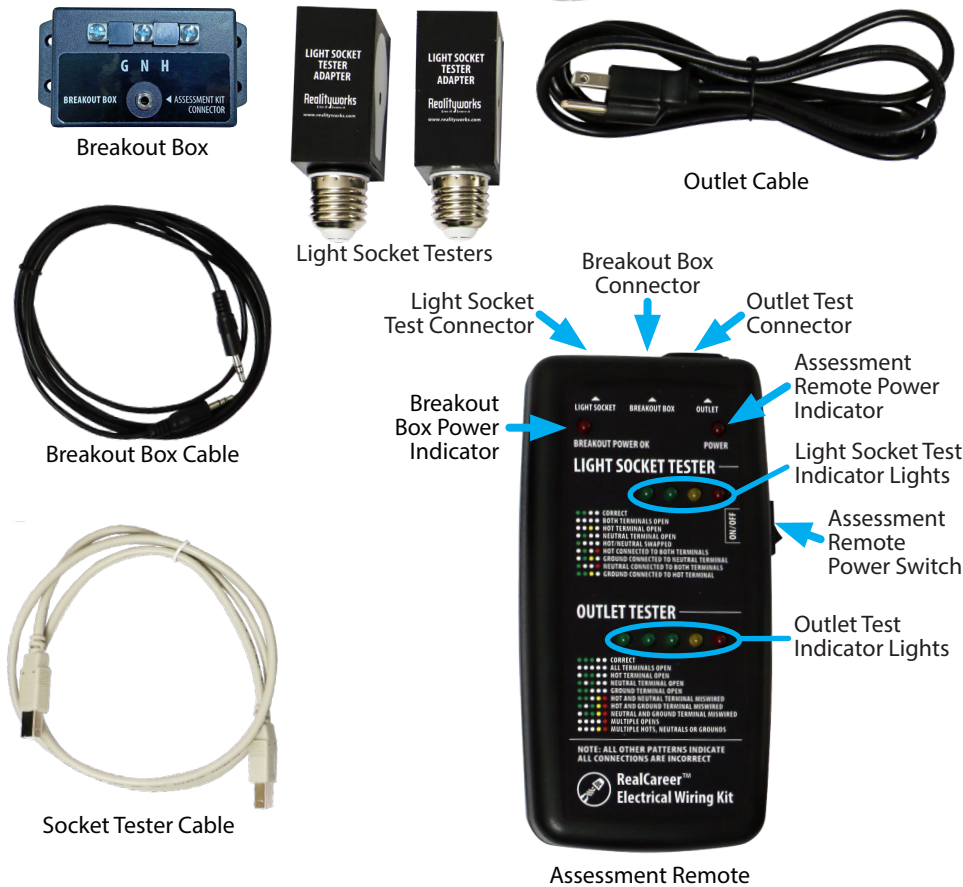
Electrical Wiring Kit Includes:

1. Wall Panel Demonstrator
2. Electrical Wiring Components:
 - 1 Breakout Box
 - 2 single pole switches
 - 2 3-way switches
 - 3 15A duplex receptacles
 - 2 ceramic lamp holders
 - 1 ceramic lamp holder, with pull chain
 - 20 feet of 14-2 NM-B with ground wire
 - 13 feet of 14-3 NM-B with ground wire
 - 25 standard wire connectors
 - 1 roll of black electrical tape
3. Electrical Wiring Assessment Kit:
 - 1 Assessment Remote
 - 1 Breakout Box
 - 2 Light Socket Testers
 - 3 Cables (Breakout Box Cable, Outlet Cable and Socket Tester Cable)
 - 4 AA batteries
 - 1 Student Exercise Workbook
 - 1 Quick Start Guide
4. Downloadable Electrical Wiring Kit Curriculum



Electrical Wiring Assessment Kit Instructions

The Electrical Wiring Assessment Kit is used to assess wiring projects. The Assessment Remote generates DC voltages to energize wiring projects and identify the voltages at the outlets and/or sockets to determine if the wiring is correct.



Installing Batteries

The Assessment Remote is powered by four AA alkaline batteries. Place four batteries in the battery tray for usage.

NOTE: Rechargeable AA batteries may also be used. Batteries may remain installed when not in use, but should be removed for long-term storage. Battery life is up to 40 hours of continuous usage.



HARDWARE SET UP

Electrical Power for Testing Purposes

The Assessment Remote is the power source for testing the electrical components in the Wall Panel Demonstrator.

1. Plug the Breakout Box Cable into the Breakout Box Connector which is the center port on top of the Assessment Remote.



2. Plug the other end of the Breakout Box Cable into the Breakout Box attached to the Wall Panel Demonstrator.



NOTE: An extra Breakout Box is included separate from the Wall Panel Demonstrator to test electrical projects. The electrical wiring projects must be wired directly from the Breakout Box. Use the Assessment Remote to assess and power projects.

Turning the Assessment Remote ON

Breakout Box Cable must be plugged in before turning the Assessment Remote on for testing.

1. Turn the Assessment Remote Power Switch to “ON.”
2. The power indicator light above the switch will be red, indicating full power.
3. To preserve battery life, turn switch to “OFF” when not in use.



NOTE: The indicator lights will flash six times rapidly if the battery life is low. Replace or recharge the batteries if the red Power Indicator light does not appear or if the light is dim.

Tripping a Circuit on the Assessment Remote

The Assessment Remote has an internal circuit breaker. If the “Breakout Power OK” indicator light turns off when the power switch is turned “ON”, a short circuit was detected and turned off power to the Breakout Box.

To reset the internal circuit breaker, turn the Assessment Remote off and back on.

Wall Panel Demonstrator

The Wall Panel Demonstrator is used to practice various electrical wiring for outlets and light sockets.



STUDENT WIRING AND EXERCISES

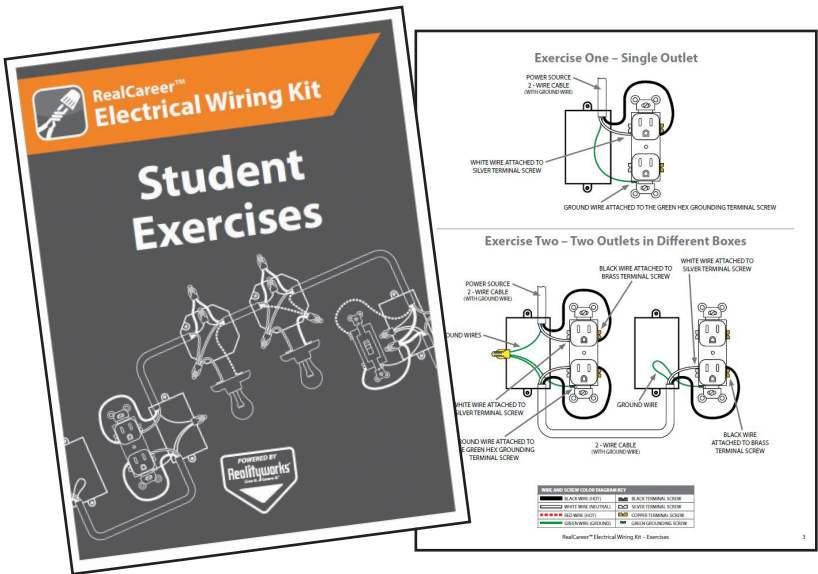
Wiring to the Breakout Box

Before student exercise testing can occur, the power source wire must be connected to the Breakout Box. Connect the ground (bare brass) wire to the terminal labeled G, the neutral (white) wire to the terminal labeled N, and the hot (black) wire to the terminal labeled H.



Student Exercise Workbook

The Student Exercise workbook has 16 different wiring exercise diagrams. Use the workbook with the Wall Panel Demonstrator and electrical components to practice correct wiring. After each exercise, use the Electrical Wiring Assessment Kit to evaluate the quality of wiring.



TESTING STUDENT’S WIRING

Wall Panel Demonstrator Light Socket Testing

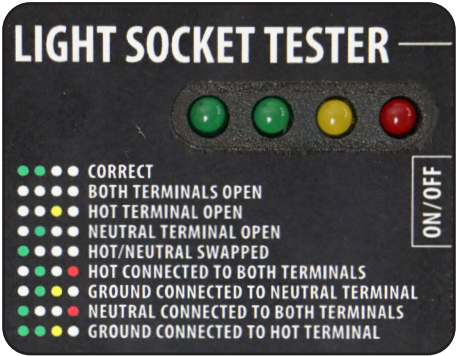
The Wall Panel Demonstrator is powered by the Assessment Remote for light socket testing. This can test single, 3-way, and 4-way light circuits.

1. Turn Assessment Remote Power Switch to “OFF.”
2. Install a Light Socket Tester into the light socket for testing. Do not overtighten.
3. An LED light may turn on as a standard bulb would in a typical circuit. This does not always mean the wiring was done correctly.
4. Plug the Light Socket Tester Cable into the Socket Tester Connector in the left port on top of the Assessment Remote. Plug the other end of the Light Socket Tester Cable into the Light Socket Tester.
5. Turn Assessment Remote Power Switch to “ON.”
6. View Light Socket Tester indicator lights for results.



Light Socket Tester Indicator Lights

⚠ ATTENTION: DO NOT INSERT LIGHT SOCKET TESTER INTO A STANDARD SOCKET CONNECTED TO AC POWER



The Light Socket Tester is not intended for a standard socket and should only be used with a closed system powered by the Assessment Remote. Connecting to AC power may permanently damage the Light Socket Tester and/or Assessment Remote.

If no indicators are lit, check to ensure that the Breakout Box Cable and Light Socket Tester Cable are connected properly. Also, turn the power button on and off to cycle

power and reset the circuit breaker.

Wall Panel Demonstrator Outlet Testing

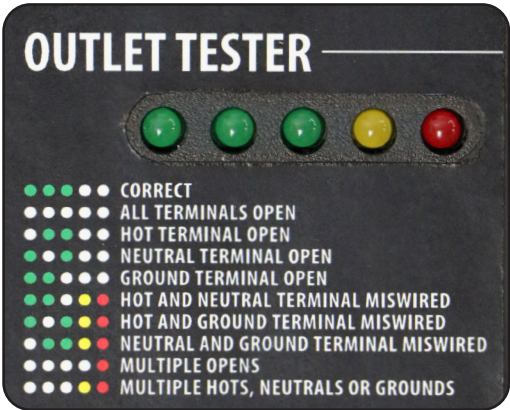
The Wall Panel Demonstrator is powered by the Assessment Remote for outlet testing.

1. Turn Assessment Remote Power Switch to “OFF.”
2. Plug the Outlet Cable into the Outlet Tester Connector in the right port on top of the Assessment Remote. Plug the other end of the Outlet Cable into the Wall Panel Demonstrator outlet to be tested.



3. Turn Assessment Remote Power Switch to “ON.”
4. View Outlet Tester Indicators lights for results.

Outlet Tester Indicator Lights



⚠ ATTENTION: DO NOT PLUG THE OUTLET CABLE INTO STANDARD OUTLET

The Outlet Cable is not intended for a standard outlet and should only be used with a closed system powered by the Assessment Remote. Plugging the Outlet Cable into a standard socket connected to AC power will permanently damage the Assessment Remote.

If no indicators are lit, check to ensure that the Breakout Box Cable and Outlet Cable are connected properly. Also, turn the power button off and on to cycle power and reset the circuit breaker.

Help and Information

Online Product Support

We're here to help! Our online Product Support features video tutorials, downloadable documents, frequently asked questions and product notices, all of which make it easy for you to get support for products, software and more, day or night. Find our online product support area here: www.realityworks.com/support/

Online Store

Supplies, accessories, select simulators, curriculum and more are available for purchase from our online store 24 hours a day!

Find our online store here: <https://www.realityworks.com/>