Introduction
The **Frug-ALL Horn** is a low-cost (frugal) continuity sensing device with auditory and visual output invented at the Artificial Language Laboratory (ALL). The auditory output is in the form of a configurable tone or warble. The visual output is provided by an LED. The device was originally created to help diagnose a person’s dexterity in operating control switches. The following examples highlight this and many other possible uses for this product.

The **Frug-ALL Horn** uses low voltage battery power and is safe to operate.

Switch Tester
Many standard momentary contact switches are available for controlling communication aids, environmental control devices, computers and other aids for daily living. Such a switch can be tested by plugging it into the standard mono 3.5 mm mini jack on the front of the **Frug-ALL Horn**.

Touch Switch
You can connect a two-wire cable to the Frug-ALL-Horn’s input jack using a 3.5 mm mini plug. You can then connect the free ends of the cable through a person’s body or any conductive object. When you do this, a circuit is completed that turns on the sound and visual feedback. When this circuit is broken, the sound and visual feedback are turned off. Two or more people can form a chain by holding hands. [Hint: For better conductivity it is best to dampen the body part that is touching the wires.]

Call Alert Signaling Device
The **Frug-ALL Horn** and a momentary switch can be mounted on a person’s wheelchair or bedside table and used to alert a caretaker.

Morse Code Oscillator
By configuring the internal dip switch to produce a steady tone, the **Frug-ALL Horn** can be used to send and practice Morse code communication.

Waterbed leak alarm
Placing the bare ends of the wire under a waterbed mattress causes the **Frug-ALL Horn** to beep when moisture is present.

Liquid Level Detector
A blind person can detect the level of water or other conductive fluid in a container by inserting the ends of the wire.

Continuity Tester
The Frug-ALL-Horn can help diagnose a faulty connection or broken wire.

Force sensor tester
Connecting force sensing resistors to the **Frug-ALL Horn** provides auditory feedback when the sensor is pressed.

Educational tool
The **Frug-ALL Horn** demonstrates electrical principles of conductivity, resistance and oscillation. The student is able to safely feel and see how electricity works.

Hand Writing Training Device for the Blind
Pencil lines on paper can be followed using a metal stylus. This more realistic method teaches the blind how to generate letters and other symbols.

A Fun Toy
Many creative games and other activities can be invented using the **Frug-ALL Horn**.