**CD++ Model Data Form**

**Title:** Remote Home Appliance Control Model

**Type:** DEVS Model

**Acronym/Short name**: Remote Home Appliance Control Model (RHACM)

**Purpose for which Developed:** A model that allows a home owner to control appliances remotely by dialing a phone number.

**Other Applications for which it is Suitable**: Industrial control

**Date Developed/Implemented:** 2017

**Domain:** Electronics and Control systems

Current Version:

URL:

**Description (including characteristics):**

The homeowner dials the phone number corresponding to the GSM module installed (which is set to auto answer) and then he must press a number depending on which device he needs to turn ON/OFF, this number corresponds to a frequency which the GSM module receives and then transmits through its output ports, this provides input to the DTMF model which converts the received frequency to a unique sequence of bits corresponding to each frequency received. The output from the DTMF is sent to a microcontroller (MCU) which sends the necessary signal to the relays to control the appliance(s) in question, this MCU also sends a number to the SoundCh which would tell the home owner what device was turned ON/OFF.

Links to Related Documents

Short Title:

URL:

Description:

**Keywords:** GSM, DTMF, frequency conversion, relay switch

**Developer:**

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