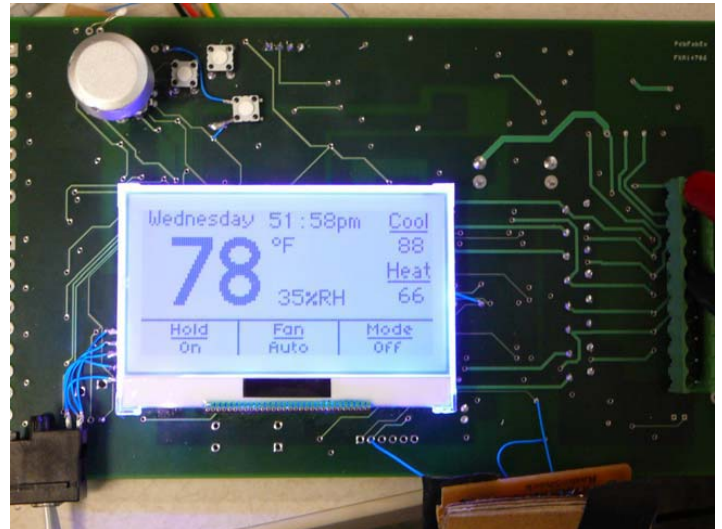




HSTAT Technology for HVAC Health Status and Control

Project Data: Research and Development

Faulty operation of HVAC systems including air-conditioners and heat pumps in residential buildings is prevalent and results in increased energy use. Common faults are incorrect refrigerant charge, incorrect airflow, evaporator fouling (dirty indoor air-filter), and condenser fouling (dirty outdoor coil). According to a California study, tests of over 4000 residential air-conditioning systems show about 34% are undercharged and 28% are overcharged. Such systems waste energy and go unchecked until there is a serious problem. Currently, there are no on-board fault detection systems for residential air-conditioning systems. SWA has been working with Home Automation, Inc. (HAI) on the development of a device that has the control functions of a thermostat and a humidistat as well as an on-board fault detection capability for residential and light commercial air-conditioning systems. This development effort has been sponsored by the US DOE under the SBIR program.



Client: Home Automation, Inc.

Building Type: Residential

Project Status: Completed

Reference: www.homeauto.com

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