

DIY Zoning: Introduction for Home Owners

by Vadim Tkachenko

1. Intended Audience

This section of the site is dedicated to those who are having problems with their home comfort. Whenever you feel too hot, too cold, too stuffy, or otherwise uncomfortable, you've come to the right place.

2. What DZ is

The DIY Zoning Project (DZ for short) is divided into two big parts:

2.1. A Knowledge Base

A collection of bits and pieces of knowledge to help people understand what temperature zoning is all about and dispel common myths related to it. [Home Owners FAQs](#) is a good place to start;

2.2. A Temperature Zoning System

A collection of bits and pieces of knowledge to explain how to put together mostly off-the-shelf inexpensive equipment and make a temperature zoning system out of it, and a software product that allows you to control the hardware. [Advanced](#) section covers this part.

2.3. Features at a glance

This is what DZ as a temperature zoning system is offering:

2.3.1. Consumer features

- Temperature can be maintained on per-zone basis;
- Allows scheduled temperature changes: unlimited number of periods per day, 7 days a week;

- Individual zones can be put "on hold" (i.e. maintain the set temperature with no regard to the schedule);
- Supports a notion of "unoccupied" zone (individual zones can be shut off without affecting the rest of the house);
- Supports a notion of "away mode";
- In "away" or "shut off" mode the system will take measures to conserve energy. In particular, if less energy will be spent maintaining the house or zone at preset temperature than shutting off the unit and then re-heating (or re-cooling), it will maintain the temperature;
- Individual zones can be programmed to maintain the preset temperature regardless of the settings for the rest of the house (example: computer room in the summer);

2.3.2. Installation

- Works with any air conditioner, heat pump and/or water boiler system for which a standard thermostat connector is available;
- Supports unlimited number of zones (as opposed to limited to usually 4, rarely 8 or more provided by commercial vendors);

2.3.3. Serviceability

- Allows remote monitoring, diagnostics and control;
- Warns the homeowner to change the filter when it is necessary (as opposed to fixed time change intervals);
- Warns the homeowner when the system performance degradation is detected;
- Provides Email or SMS (Short Message Service) notifications to user's cell phone or PDA.

For more detailed information, read the [Design Contract](#) section.

3. What DZ is NOT

DZ is **not** a single packaged product you can buy (we're working on it). Neither it is something you can pay somebody to install for you (we're working on that, too).

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