

# Automation keeps controls at fingertips without being home

By Dan Sheehan

I finally hooked my home up to the Internet and I cannot stop smiling. As I sat at my desk on my Blackberry and was able to turn my heater on and off and control the temperature I smiled as I realized just a few of the possibilities such as cranking the heat up as I sit on a chairlift in anticipation of heading home from a long day of Lake Tahoe skiing.



This is just the tip of the iceberg. There are so many uses for home automation and the possibilities are endless. You can control anything that is switched or plugged in, locks, garage doors, cameras, TVs and more. There are numerous ways to automate and control your home and each has its benefits, costs.

I am using Z-wave technology controlled by a Vera controller from MiCasa Verde. I have a client whose home I am remodeling right now in Alpine Meadows. They just bought the home last fall. Through the winter they found all the downfalls the home exhibited. Mainly, the home was just plain cold. They wanted the best heat you can get, so we tore out all the floors and are installing radiant floor heating. No matter what type of heat system you use to heat your home, nothing is instant. Radiant floor heating is probably the slowest way to heat a home, but also one of the most comfortable and cleanest to your personal environment. It can take a day to get a home up to a comfortable temperature when it has been sitting during the winter. So I am connecting the eight thermostats in the home to the internet using Z-wave technology and the Vera2 control system. The homeowners will be able to access this

control system from their laptops or cell phones and control each of the thermostats.

The possibilities are endless. You can set all kinds of scenes/scenarios. I will probably start this client off with five "scenes" – 1) heading up to Tahoe 2) arriving 3) headed out to the mountain 4) back from skiing 5) nighttime 6) headed out of Tahoe.

Scene "1" I will set it so that when they run the scene the temperature of their home will rise to a comfortable level so that when they arrive it will be warm.

Scene "2" they can "run" when driving to their home. With this scene the entry lights will go on, the front door will be unlocked, the hot water recirculating valve will start and maybe some music will come on.

Scene "3" can be used to turn off the lights, lower the heat and lock the doors when everyone heads out to the mountain to go skiing.



Home  
automation  
makes a house  
run  
efficiently.

Scene "4" can be a combination of Scene "1" and Scene "2" for when they are heading home so by the time they get there the place is warmed up.

Scene "5" would shut the light down and lower the heat for each zone according to temperature preferences for sleeping for watch individual zone/room.

Scene "6" could be set as a leaving town action where the heat is set to 48 degrees or whatever is a safe temp, lights are off and doors are locked.

I have another client who introduced the system to me. He has a second home here in Lake Tahoe that he rents out a lot. After getting the electric and gas bills he decided to do something. He found the Vera system and now can turn off all the lights and heat when the renters have left.

I have a project where I am installing a roof ice-melt system to melt the snow on the perimeter of the roof edge and divert the water away in gutters. The system uses about 36 watts per foot so it is very expensive to operate. The system operates off a thermostat so it is on when it is cold even if it is not snowing. I am looking into hooking it up to the Vera controller so the client can turn it off from San Francisco when he knows it is cold but has not snowed recently. I could install moisture sensors, but they are unreliable and could render the system ineffective.

There are all types of systems used to automate your home and prices can vary greatly from system to system. My intention is not to compare the different systems. I do know that the system I am using is about as cost-effective as you can get for what you can do.

You will need the controller which retails for \$238. This hooks up to your homes internet router and is accessible for free using the MiCasaVerde secure servers. I have a simple thermostat that cost \$50. So to control your thermostat from the Internet it can cost less than \$300. Then you can swap-out your light switches for Zwave switches (you literally just swap them out and those can run from \$30-\$200 each. Cameras

from from \$60 to \$500. I am testing a few really decent cameras which you can control the tilt and pan, these are going for less than \$100.

DS Construction is an authorized dealer and distributor for MiCasa Verde and Automated outlet. f you are interested in learning more, feel free to contact us.

*Lake Tahoe general contractor Dan Sheehan is the owner of DS Construction. You may read more from his construction blog.*