

## The House Control & Modulating/Condensing Boilers

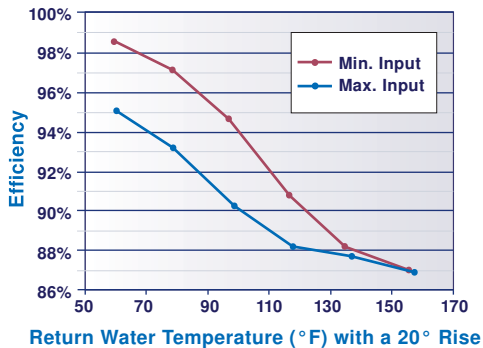


Modulating Boilers are becoming more popular due to the promises of improved efficiency. However, there is a catch — return water temperatures must be low enough to promote condensing.

## Indoor Feedback Can Help!

Solar gains, appliances and even people contribute significant heat to any home. tekmarNet® Thermostats take these factors into account, requesting the minimum water temperature required to maintain comfort. Lower water temperatures prevent room overheating, reduce energy costs and significantly improve boiler efficiency. Put Indoor Feedback to work and be rewarded with true system efficiency.

Modulating / Condensing Boiler Water Temperature Versus Efficiency



## What If I Already Have An Outdoor Reset Control Inside My Boiler?

Outdoor reset is a good start, but why restrict boiler response to outdoor conditions alone? With Outdoor Reset and Indoor Feedback, a House Control can modulate the boiler directly to achieve the lowest possible water temperatures for the highest potential savings.



# tekmar® House Control Systems



## Why Choose tekmar?

tekmar has 25 years of experience controlling hydronic heating systems. With reliable, cost effective controls that are easy to install and program, there is no reason to settle for a less efficient system. Choose tekmar and benefit from our world class technical support, training and a network of experienced local representatives.



For more information about House Controls or a House Control training session near you, visit the tekmar website:

[www.tekmarcontrols.com](http://www.tekmarcontrols.com)

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# Outdoor Reset... Redefined

## tekmarNet® House Controls

tekmarNet® House Controls are redefining home comfort. A single, compact control is able to provide boiler & DHW operation, four on-board zones and even mixing. With intelligent tekmarNet® Thermostats providing Indoor Feedback from every zone, achieving comfort and efficiency has never been easier.



### Features

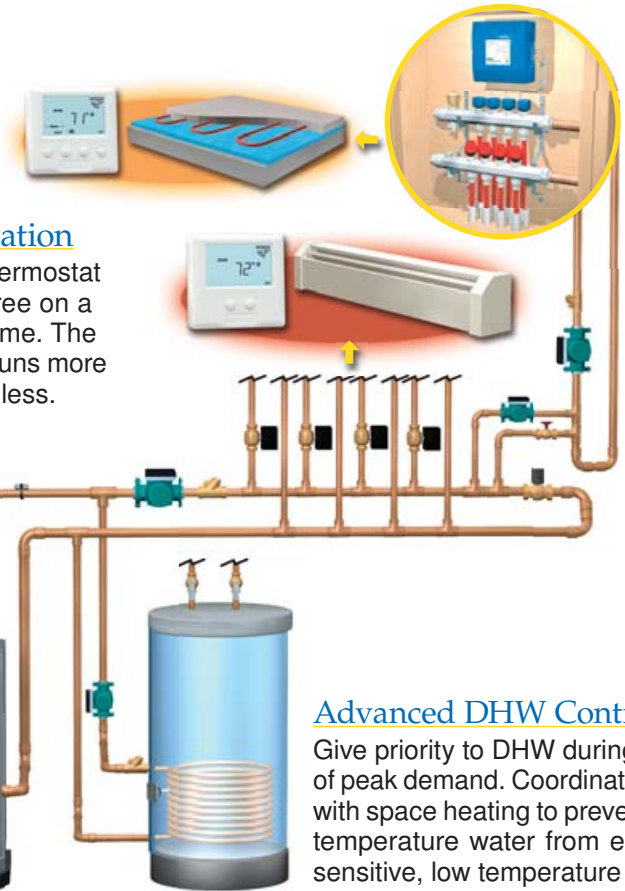
- Outdoor Reset with Indoor Feedback
- Modulating or On/Off Boiler Control
- Up to Two Water Temperatures plus DHW
- DHW and Setpoint Priority
- Warm Weather Shut Down

### Automatic Boiler Differential

Automatically adjusting the boiler differential to changing conditions ensures longer running times and reduced boiler short cycling.

### Zone Synchronization

Every tekmarNet® Thermostat communicates to agree on a 'synchronized' start time. The result is a boiler that runs more efficiently and cycles less.

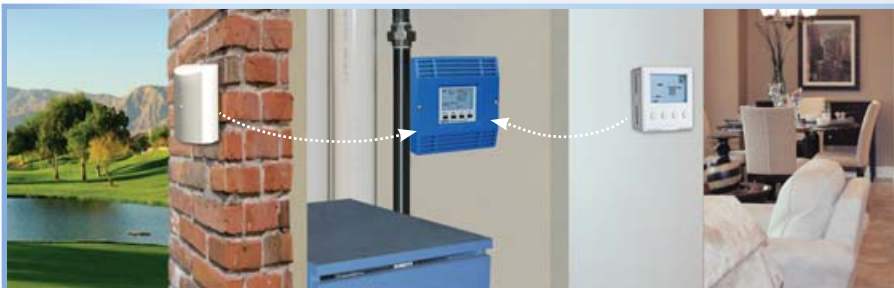


### Advanced DHW Control

Give priority to DHW during times of peak demand. Coordinate DHW with space heating to prevent high temperature water from entering sensitive, low temperature zones.

## tekmarNet® Energy Savings - Outdoor Reset With Indoor Temperature Feedback

**1.** Indoor and outdoor temperature readings are used by the House Control to calculate how much heat will be required to maintain the room temperature.



**2.** Heat is distributed at the lowest effective temperature.



### The Result

- Heat input is closely matched to building heat loss for superior energy savings.
- Lower water temperatures result in longer zone 'on' times, creating a steady load for the boiler.
- Constant room temperatures provide more comfort.
- Heating output is reduced in areas with solar or occupant-caused heat gain.
- Improved boiler efficiency, even with newer modulating boilers. (turn over to learn more) ↪