



# Smart Thermostat HD Data Sheet

ADC-T40K-HD

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

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## Specifications

**Power:** 24 VAC

**Dimensions (H x W x D):** 4.7 x 4.7 x 1.07"  
(12 x 12 x 2.72 cm)

**Operating Temperature:** 41°F to 95°F  
(5°C to 35°C)

**Installation Method:**  
Wired - Thermostat and Display  
physically connected

Wireless - Thermostat and Display connected  
wirelessly. Power Plate (ADC-T40-PP) (sold  
separately) required for Display.

**Communication:** Z-Wave SmartStart  
Z-Wave S2 Authenticated/Unauthenticated

## Compatible Systems

**Near Universal 24 V Compatibility:** Yes

**Humidifier:** Yes

**Dehumidifier:** Yes

**Forced Air:** Yes

**Heat Pump:** Yes – Compatible with both  
O and B systems

**Heat:** Up to 3 stages

**Cool:** Up to 2 stages

**Dual Fuel:** Yes

**Ventilation Control:** HRV, ERV, External  
Air Baffle



## Overview

The Smart Thermostat HD offers a sleek, color touchscreen display for an engaging experience and delivers the next-level of comfort and control. Installation is made easy with wire detection and smart system configuration, plus its flexible two-part design provides a labor-saving solution when there is no C-wire, or not enough wires, at the installation location. The Smart Thermostat HD also monitors the health of the heating and cooling system for early detection of common issues and delivers monthly performance reports.

## Features

- Touchscreen display
- Wire detection and auto configuration
- Display sync for detached thermostat installation
- Z-Wave SmartStart and S2 compatible
- Full integration with the Alarm.com platform – Scenes, energy-saving schedules, and geo-fences
- Humidity control
- Vent control

## Power Plate

The ADC-T40-PP Power Plate (sold separately) is the perfect solution when there is no C-wire, or not enough wires, present at the installation location. With the Power Plate, any two wires can power the Smart Thermostat HD display. The display and Power Plate are installed in the main living area and the thermostat is separately installed near the HVAC unit – wireless communication does the rest.

## In the Box

- ADC-T40 thermostat
- ADC-T40-HD touchscreen display
- Installation guide
- Drywall anchors and screws (x2)
- Trim plate

## Terminal Guide

Terminal	Description
Rc	Cooling Power
Rh	Heating Power
W2	Heat/Aux Stage 2
W	Heat/Aux Stage 1
C	Common wire from transformer
Z1	Configurable: W3, Humidifier, Dehumidifier, Vent
Z2	Configurable: W3, Humidifier, Dehumidifier, Vent
Y	Cool/Pump Stage 1
Y2	Cool/Pump Stage 2
G	Fan
O	Heat Pump Reversing Valve (Energized in COOL mode)
B	Heat Pump Reversing Valve (Energized in HEAT mode)