



# Honeywell Water Sensing Alarm Teardown

This guide shows the steps for tearing down a Honeywell Water Sensing Alarm into its components.

Written By: Dylan Kirkby



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## INTRODUCTION

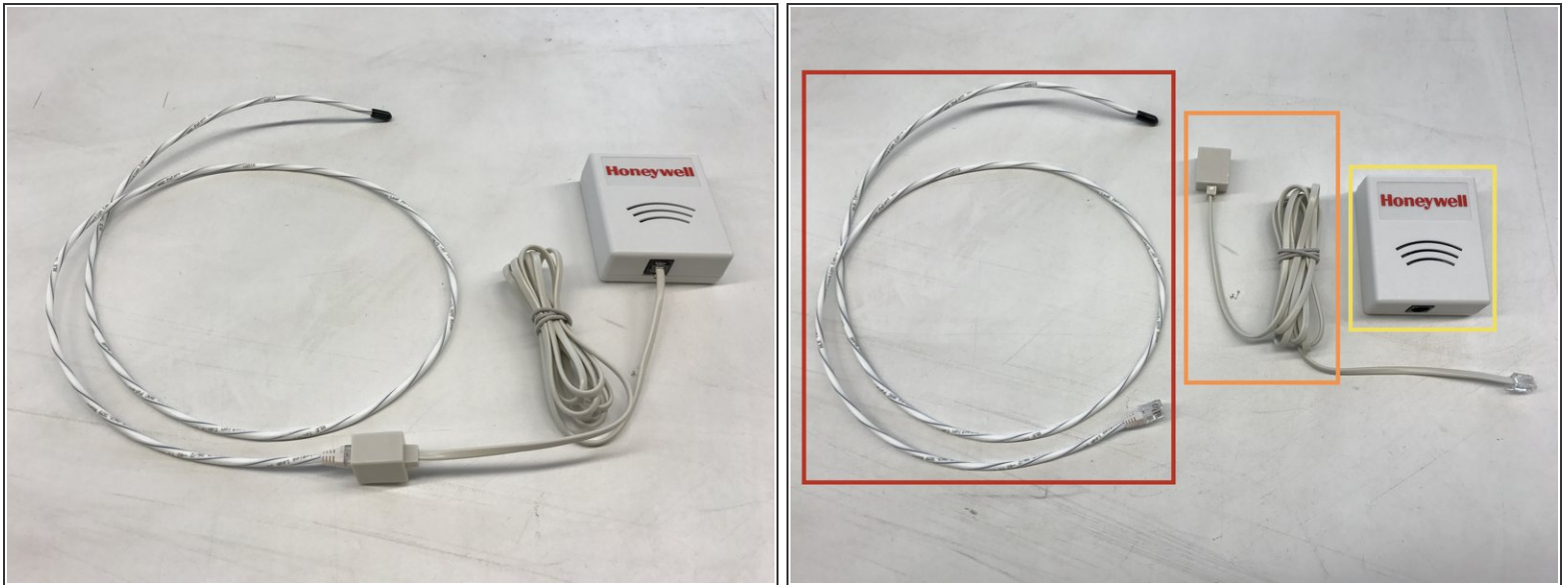
The Honeywell RWD41 Water Defense Water Sensing Alarm (available on [Amazon](#)) sounds an alarm when its sensing cable is submerged in water. This product detects water leaks early and saves homeowners costly water damage repair bills.



### TOOLS:

- [Phillips #1 Screwdriver](#) (1)
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## Step 1 — Honeywell Water Sensing Alarm Teardown



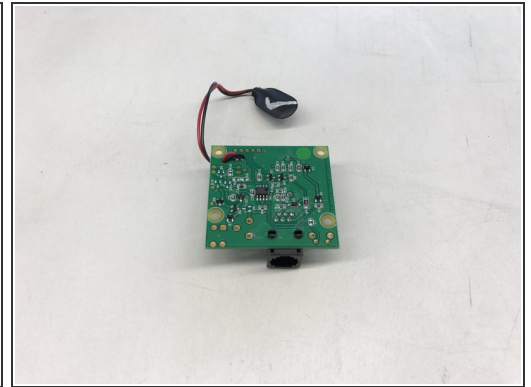
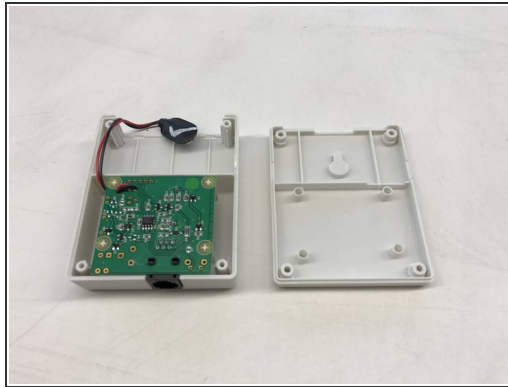
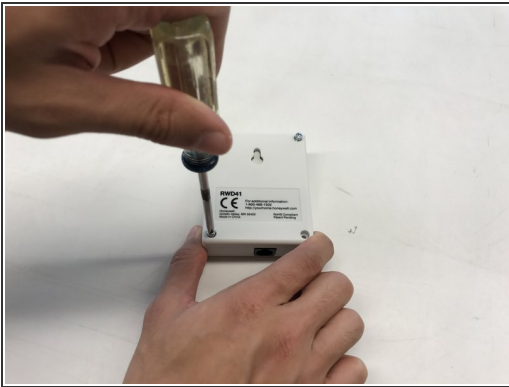
- The Honeywell Water Sensing Alarm has three components:
  - Sensing Cable
  - Extension Cable
  - Base Station
- Disconnect the RJ-11 jack that connects the base station to the extension cable.
- Disconnect the RJ-11 jack that connects the extension cable to the sensing cable.

## Step 2 — Remove Battery



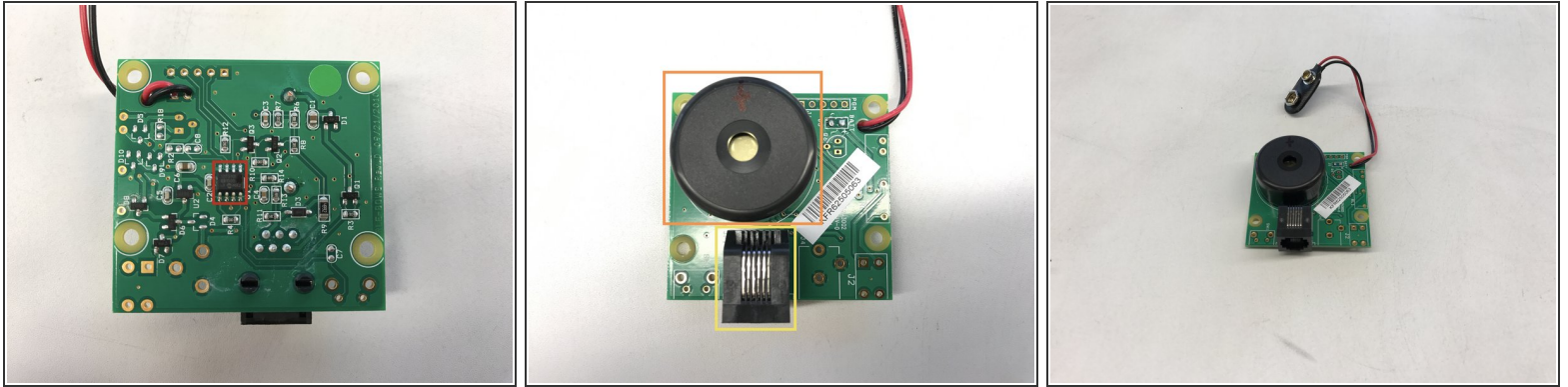
- Pop open the battery case with a fingernail and carefully remove the 9V battery without breaking the 9V battery connector still attached to the battery
- Disconnect the 9V battery connector from the battery

## Step 3 — Open Enclosure



- Unscrew the 4 screws holding the plastic enclosure together with the Phillips #1 Screwdriver
- The circuit board slides off of plastic standoffs for closer inspection

## Step 4 — Inspecting the Circuit Board



- The circuit board has three notable components
  - Microchip PIC12F510 8-bit microcontroller
  - Piezoelectric buzzer for water alert
  - RJ-11 Connector
- The Microcontroller provides a signal for the speaker and interprets the signal coming in from the RJ-11 connector.
- The Microcontroller runs off 2.0-5.5V (from datasheet [here](#)) so the board also regulates the battery 9V down to a voltage usable by the microcontroller.