



Honeywell Water Sensing Alarm Teardown

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

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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)

Step 1 — Honeywell Water Sensing Alarm Teardown



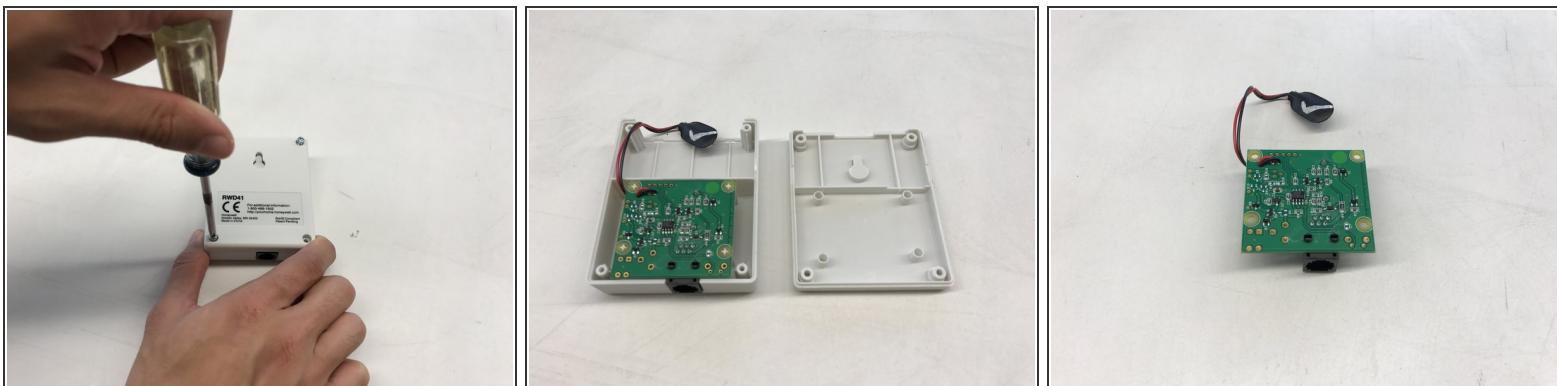
- The Honeywell Water Sensing Alarm has three components:
 - Sensing Cable
 - Extension Cable
 - Base Station
- Disconnect the RJ-11 jack that connects the base station to the extension cable.
- Disconnect the RJ-11 jack that connects the extension cable to the sensing cable.

Step 2 — Remove Battery



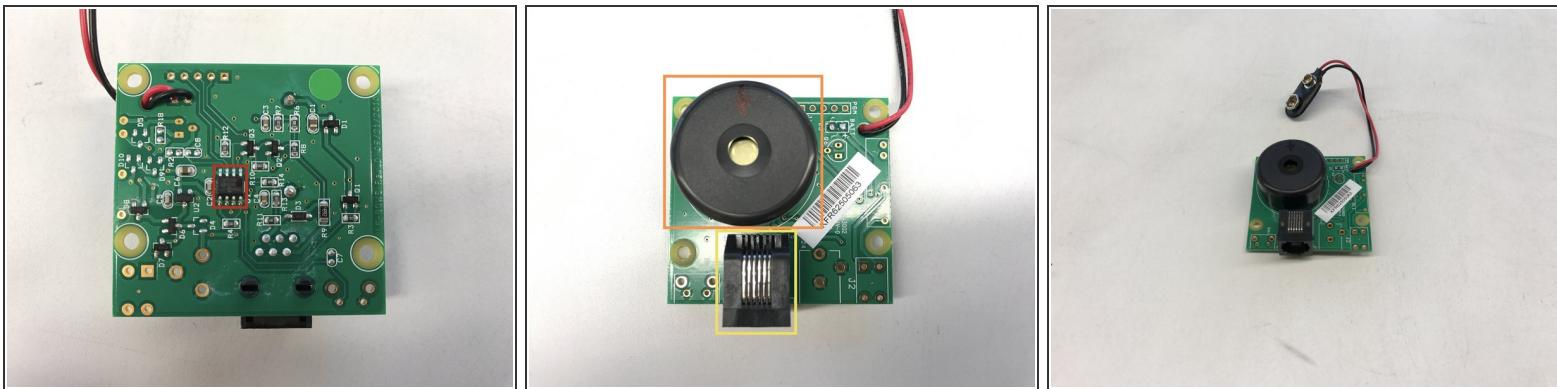
- Pop open the battery case with a fingernail and carefully remove the 9V battery without breaking the 9V battery connector still attached to the battery
- Disconnect the 9V battery connector from the battery

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.