

# LabJack

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## What is an analog input? (AI, AIN, ADC)

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AI or AIN = Analog Input

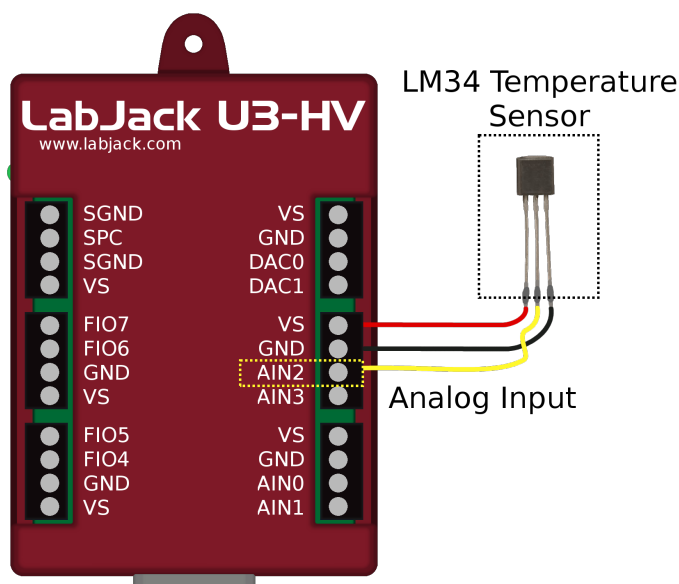
ADC = Analog to Digital Converter

An analog input converts a voltage level into a digital value that can be stored and processed in a computer. Why would you want to measure voltages? There are a multitude of sensors available which convert things like temperature, pressure, etc. into voltages. The voltages can then be easily measured by various kinds of hardware, such as a LabJack U3-HV, and then read into a computer. The computer can then convert the voltage value into it's original type (temperature, pressure, etc) and the value can then be stored in a file, emailed to someone, or used to control something else outside of the computer.

### Example:

Get temperature from a sensor using an analog input.

1. Wire the output of the analog temperature sensor to a U3-HV as shown.
2. Read the voltage on the computer to know the current temperature.
3. This particular sensor outputs 0.01 volts per °F, so 0.76V corresponds with 76°F.



### Hardware with Analog Inputs

U3



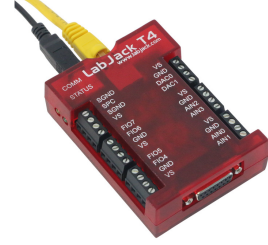
U6



UE9



T4



T7



U12

