

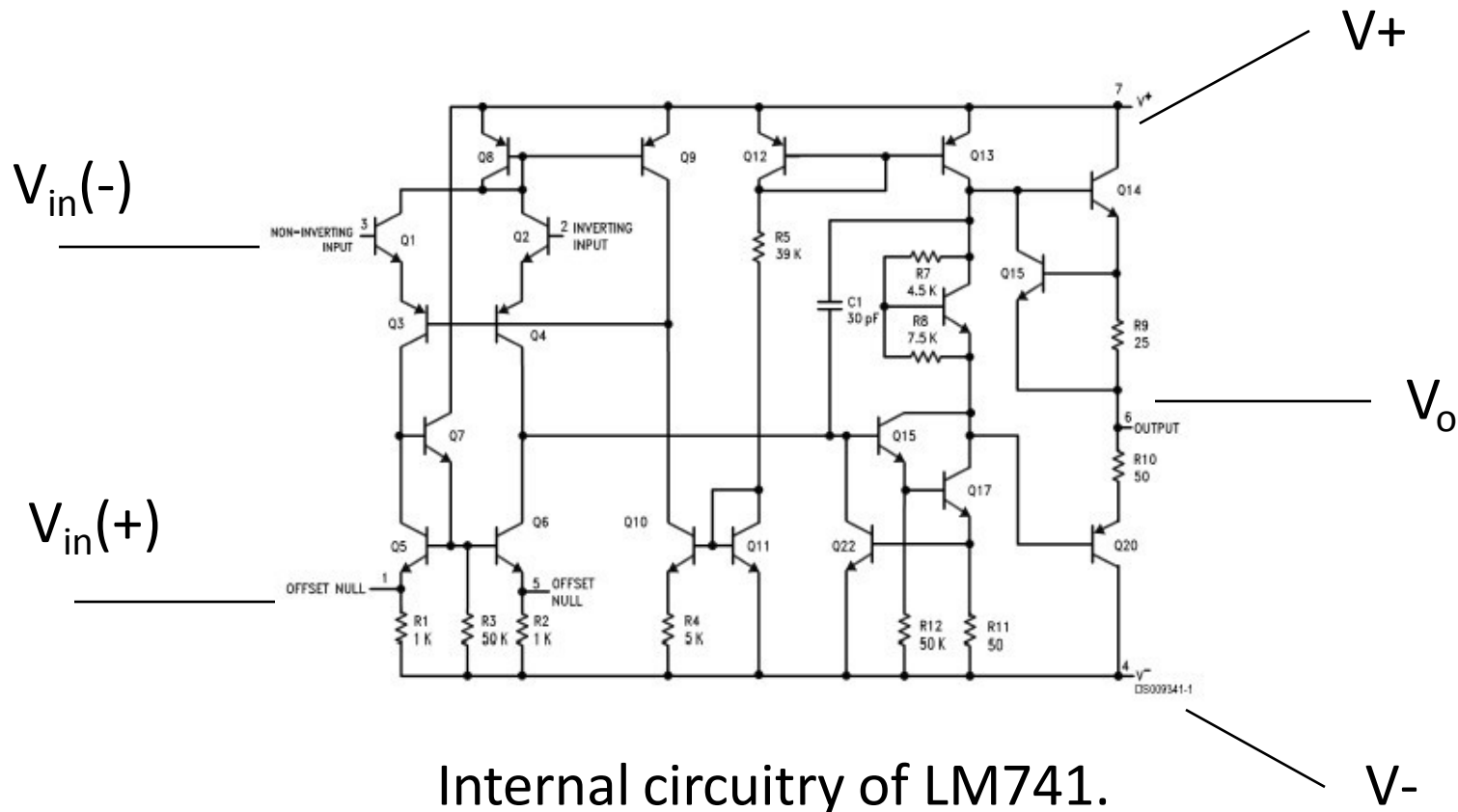
UNIT-2

Lecture-1

An Overview of Op-Amp (ideal and non ideal)
based Circuits

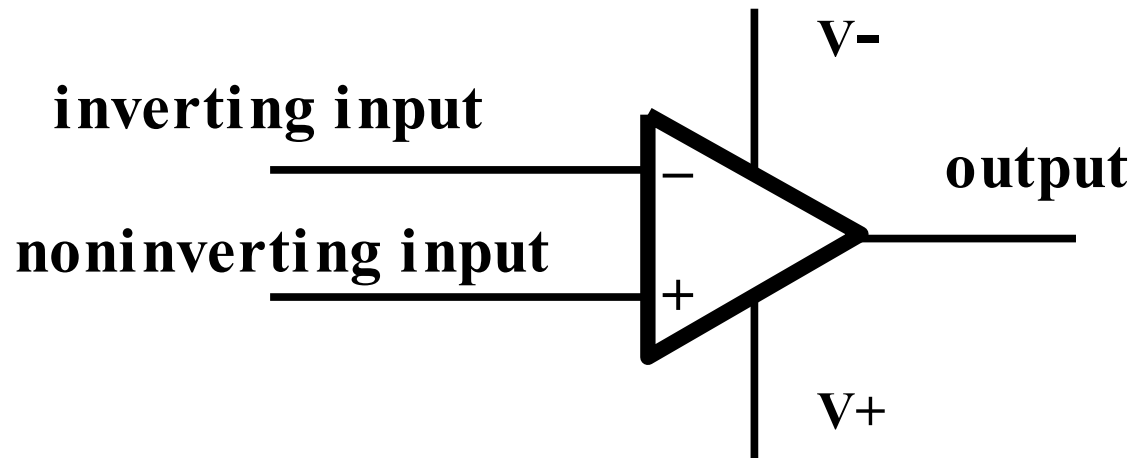
Operational Amplifiers

The op amp is built using VLSI techniques. The circuit diagram of an LM 741 from National Semiconductor is shown below.



Operational Amplifiers

The basic op amp with supply voltage included is shown in the diagram below.

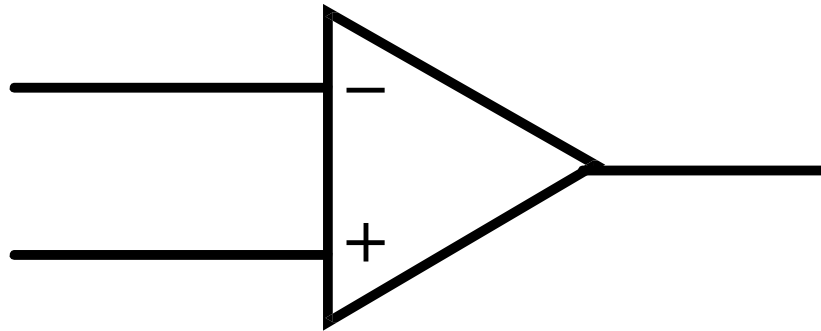


Basic op am diagram with supply voltage.

Operational Amplifiers

In most cases only the two inputs and the output are shown for the op amp. However, one should keep in mind that supply voltage is required, and a ground.

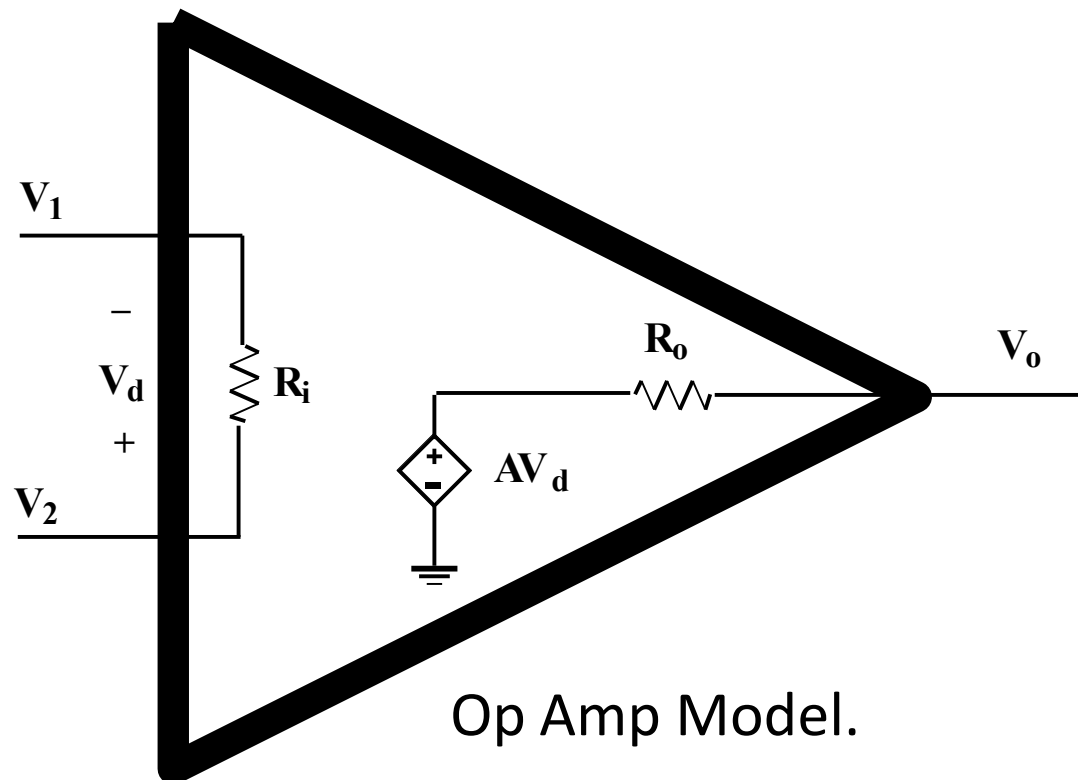
The basic op am without a ground is shown below.



Outer op am diagram.

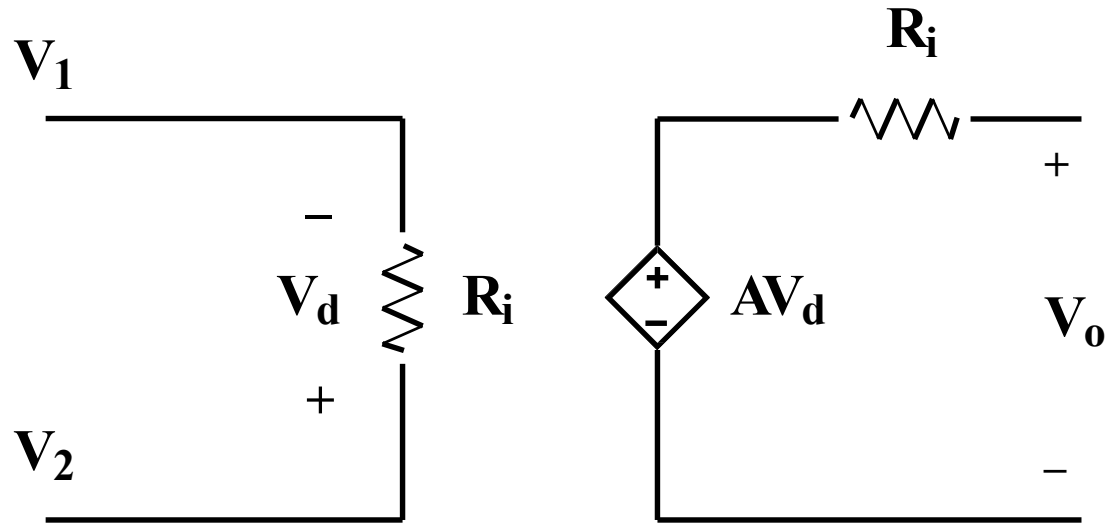
Operational Amplifiers

A model of the op amp, with respect to the symbol, is shown below.



Operational Amplifiers

The previous model is usually shown as follows:



Working circuit diagram of op amp.