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Introduction to Electronics

An introduction to electronic components and a study of circuits containing such devices.

Buffer Circuits



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Demonstrate buffer circuit behavior

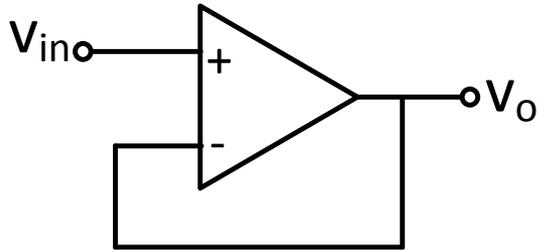
TECH

Lesson Objectives

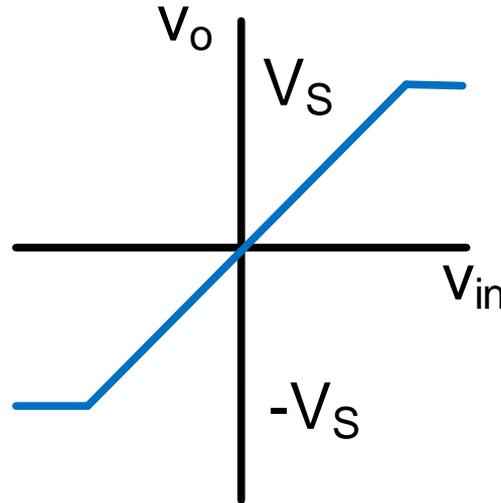
- Introduce physical op amps in circuits
- Examine Buffer Circuit behavior

Buffer Circuit

- Use to boost power without changing voltage waveform

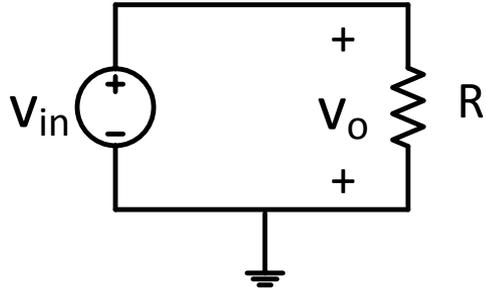


$$V_{in} = V_o$$

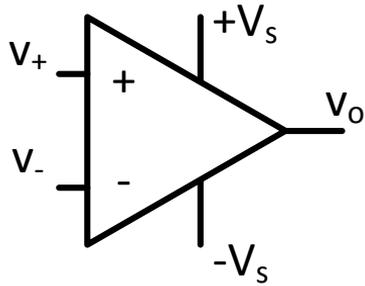


Saturation
Nonlinearity

Example: Without Buffer



Physical Op Amps

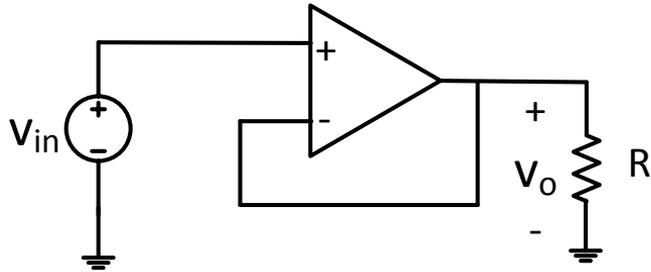
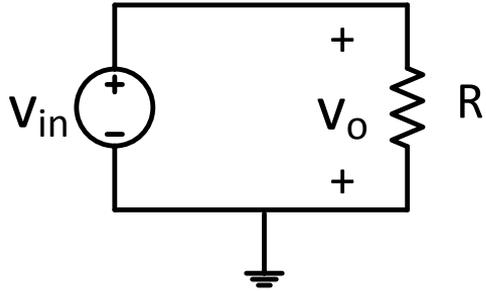


$$V_s = 15V$$

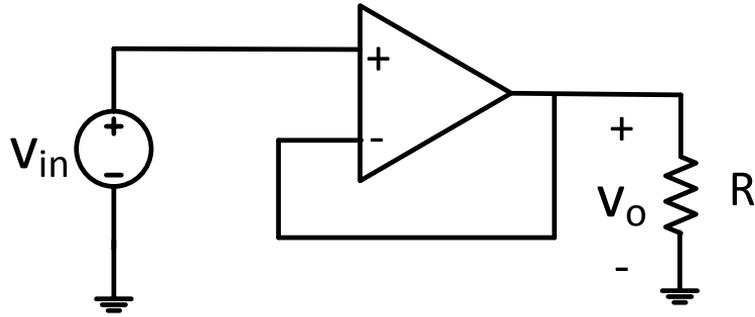
Signal	PIN
v_-	2
v_+	3
$-V_s$	4
v_o	6
$+V_s$	7



Example: With Buffer



Example: With Buffer



Summary

- ⦿ Buffers boost the power without changing the voltage waveform
- ⦿ Demonstrated physical op amp circuits

Next Lesson

- Basic Amplifier Configurations