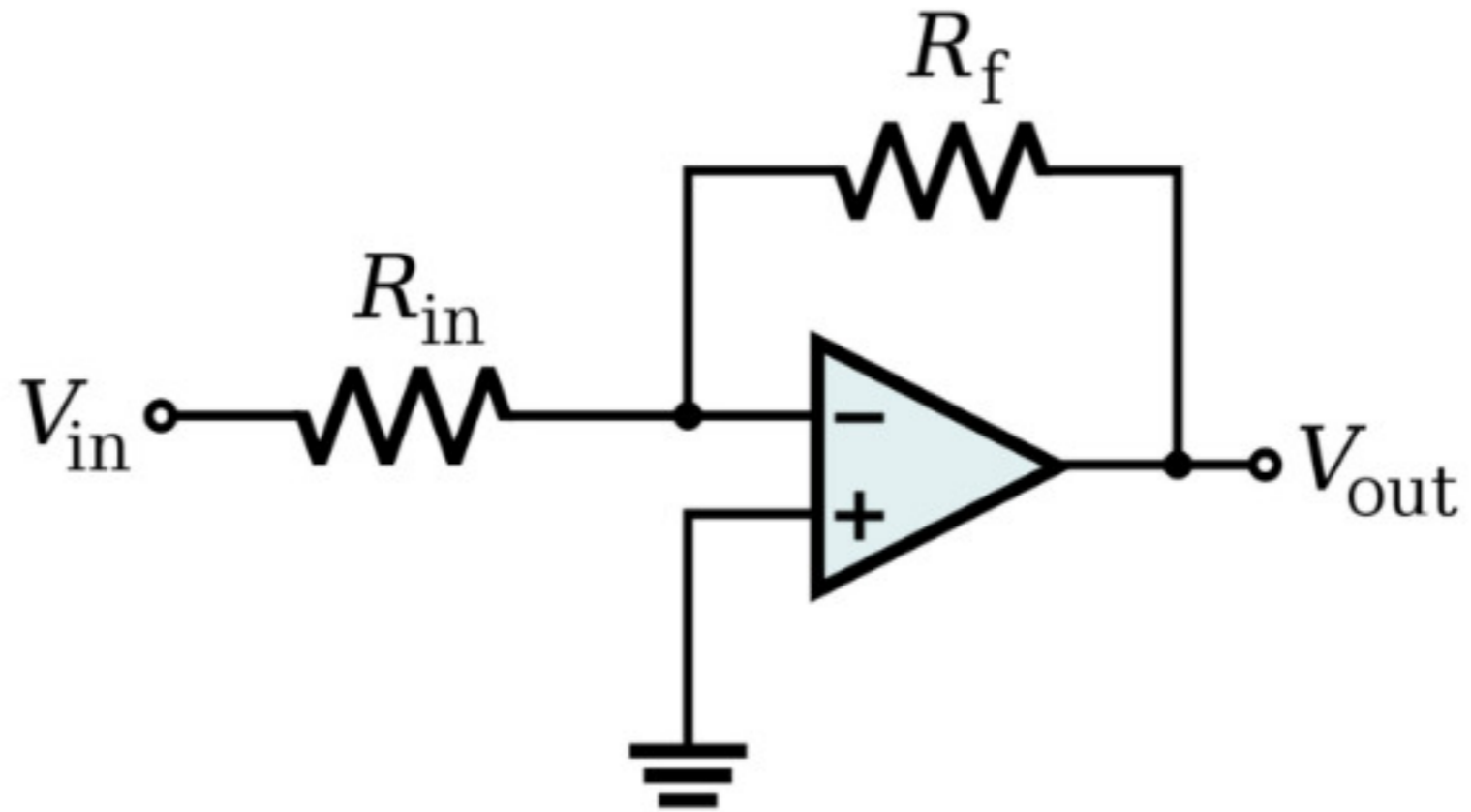


Aðgerðamagnarar

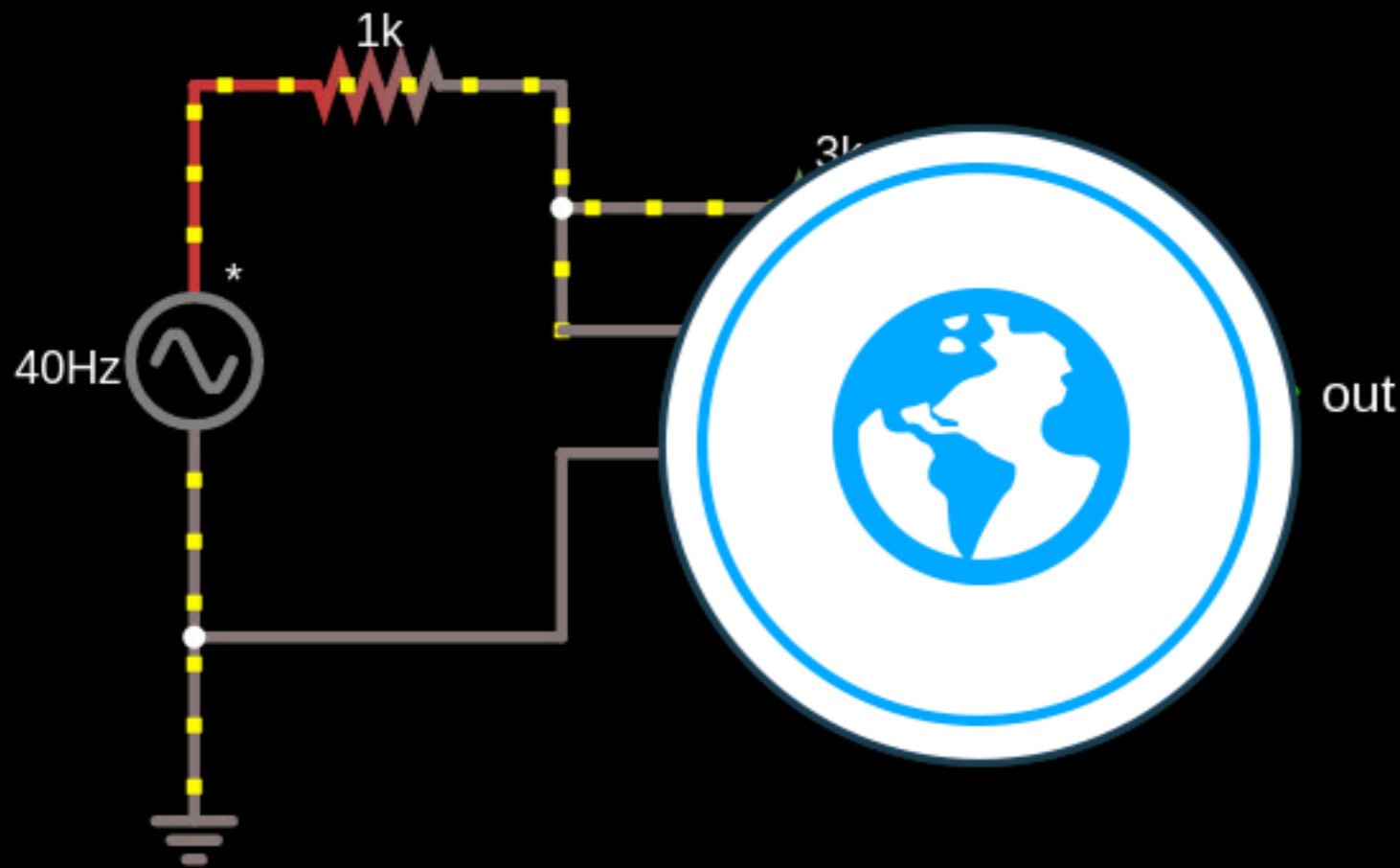
OP-AMP TENGIMÁTAR

Inverting Amplifier



$$V_{out} = -\frac{R_f}{R_{in}} V_{in}$$

Inverting AMP



Reset RUN / Stop

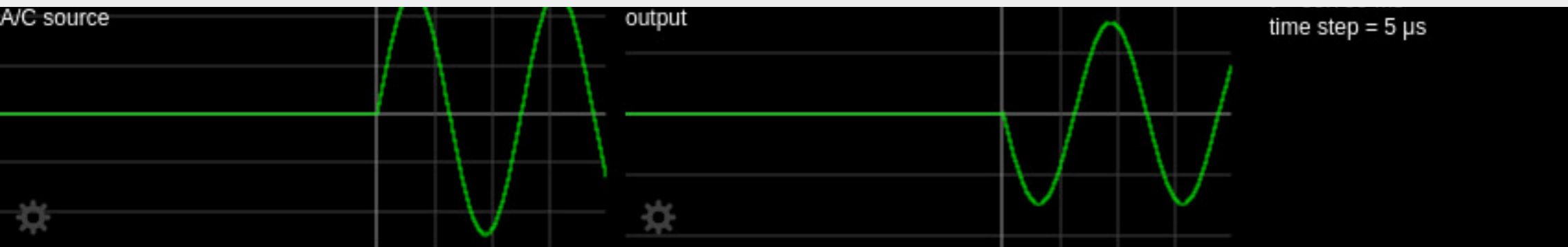
Simulation Speed < [Slider] >

Current Speed < [Slider] >

Power Brightness < [Slider] >

Current Circuit:

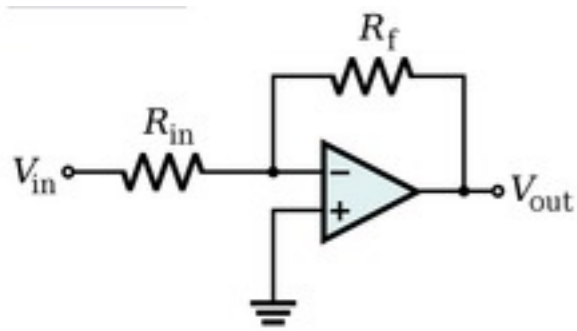
<http://tinyurl.com/y9x5eo25>





Quiz

Inverting amp

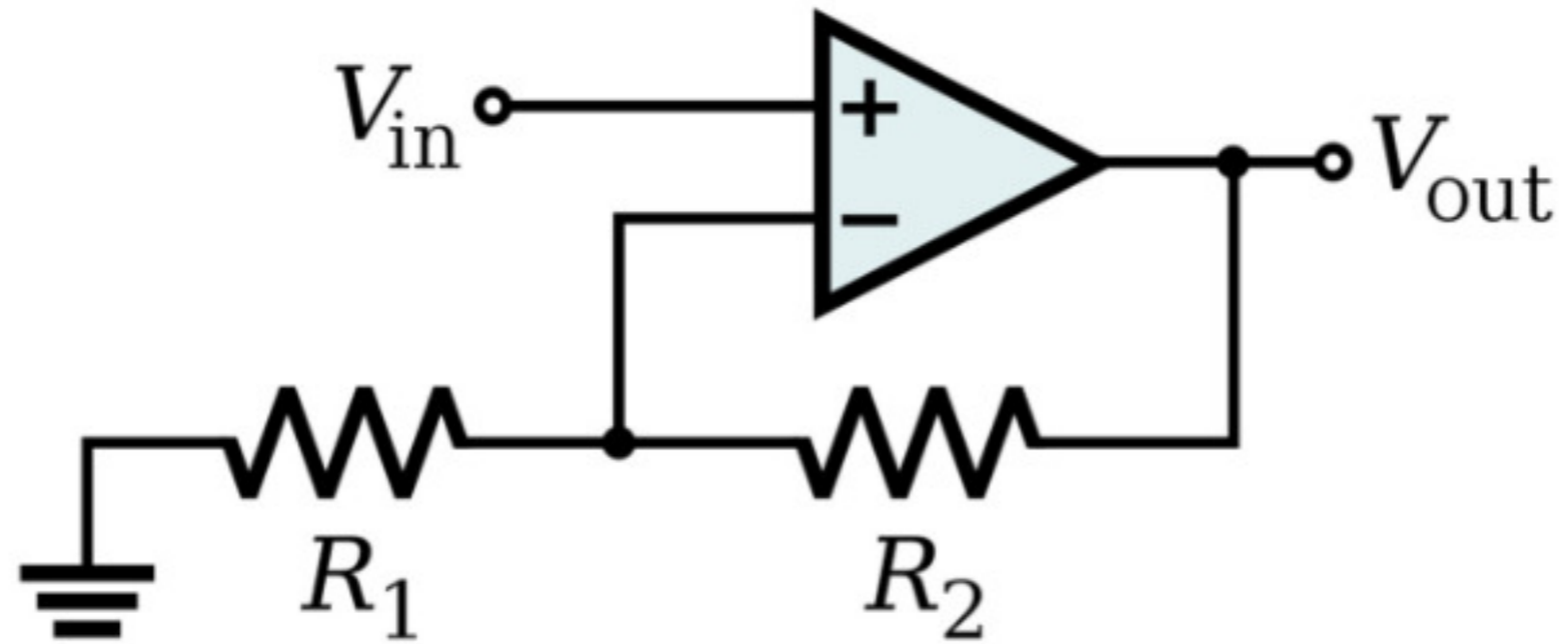


$$V_{out} = -\frac{R_f}{R_{in}} V_{in}$$

Ef Inverting magnari er með $R_f = 3k$ og $R_{in} = 1k$ fær inn á sig 5V þá skilar hann út . . .

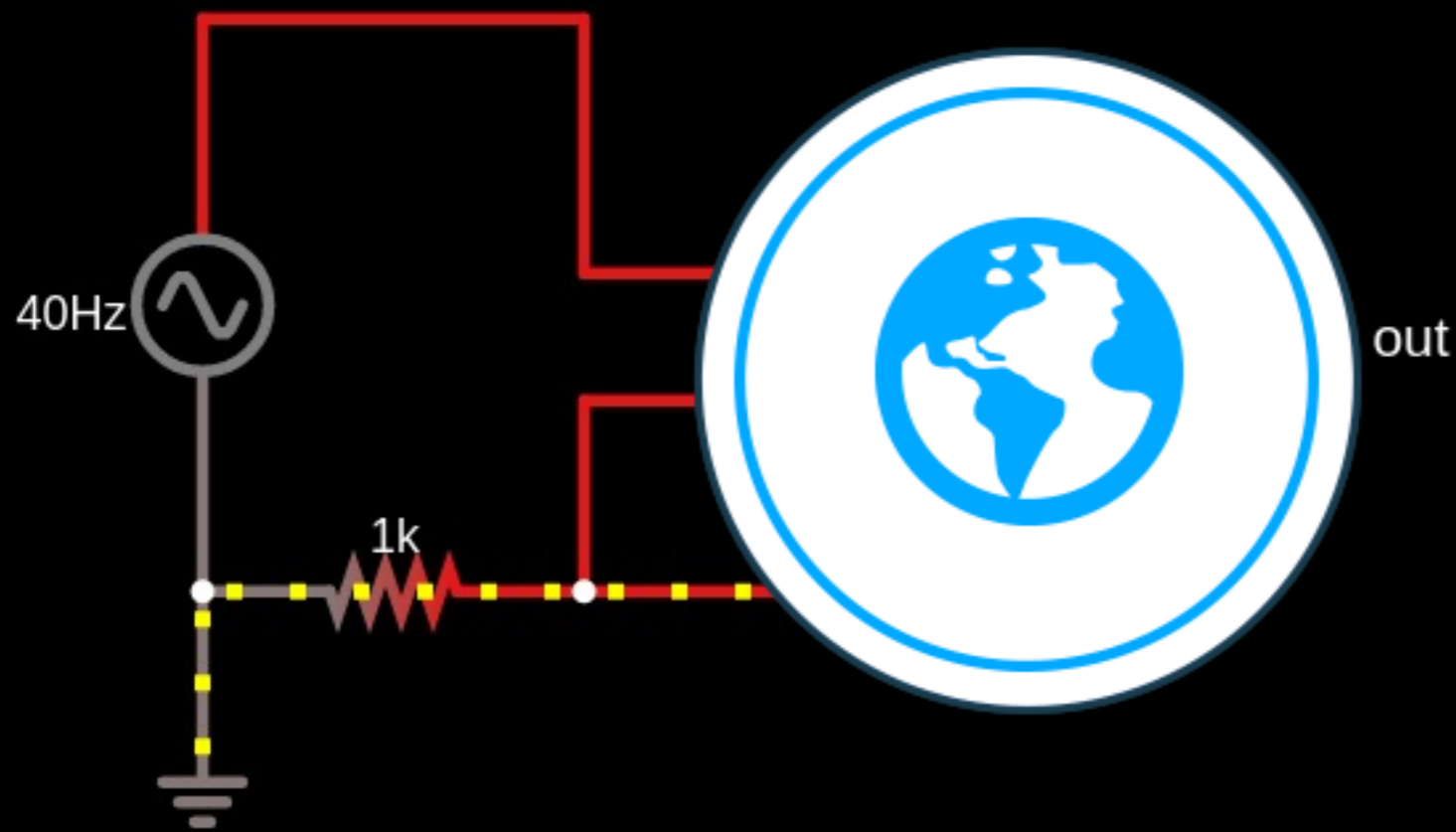
- 10 volt
- 15 volt
- 20 volt

Non-Inverting Amplifier



$$V_{out} = V_{in} \left(1 + \frac{R_2}{R_1} \right)$$

NON inverting amp



Reset RUN / Stop

Simulation Speed < [Slider] >

Current Speed < [Slider] >

Power Brightness < [Slider] >

Current Circuit:

Cable & Wire Harness Assembly

Submit Your BOM For A Free DFM Analysis On Your Electronic Assembly | Chat With Sales Now

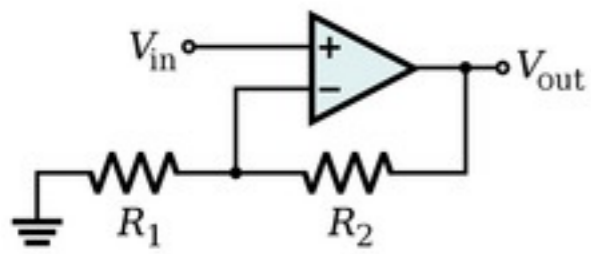
Levison Enterprises

<http://tinyurl.com/y7ze8qsm>



Quiz

Non-Inverting amp

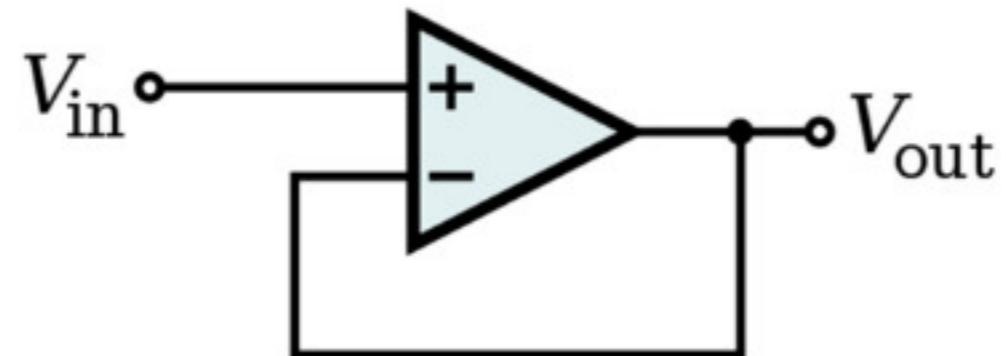


Non-Inverting magnari hefur afturvirkni með viðnámi $R_1 = 1k$ og viðnámi $R_2 = 2k$. Ef inn á hann eru tengd 5 V þá koma . . .

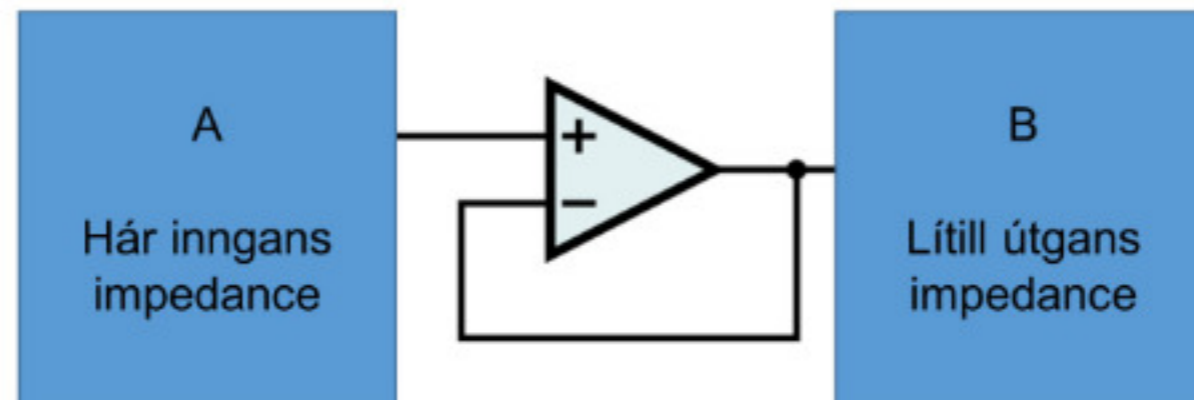
$$V_{out} = V_{in} \left(1 + \frac{R_2}{R_1} \right)$$

- 10 volt út
- 15 volt út
- 20 volt út

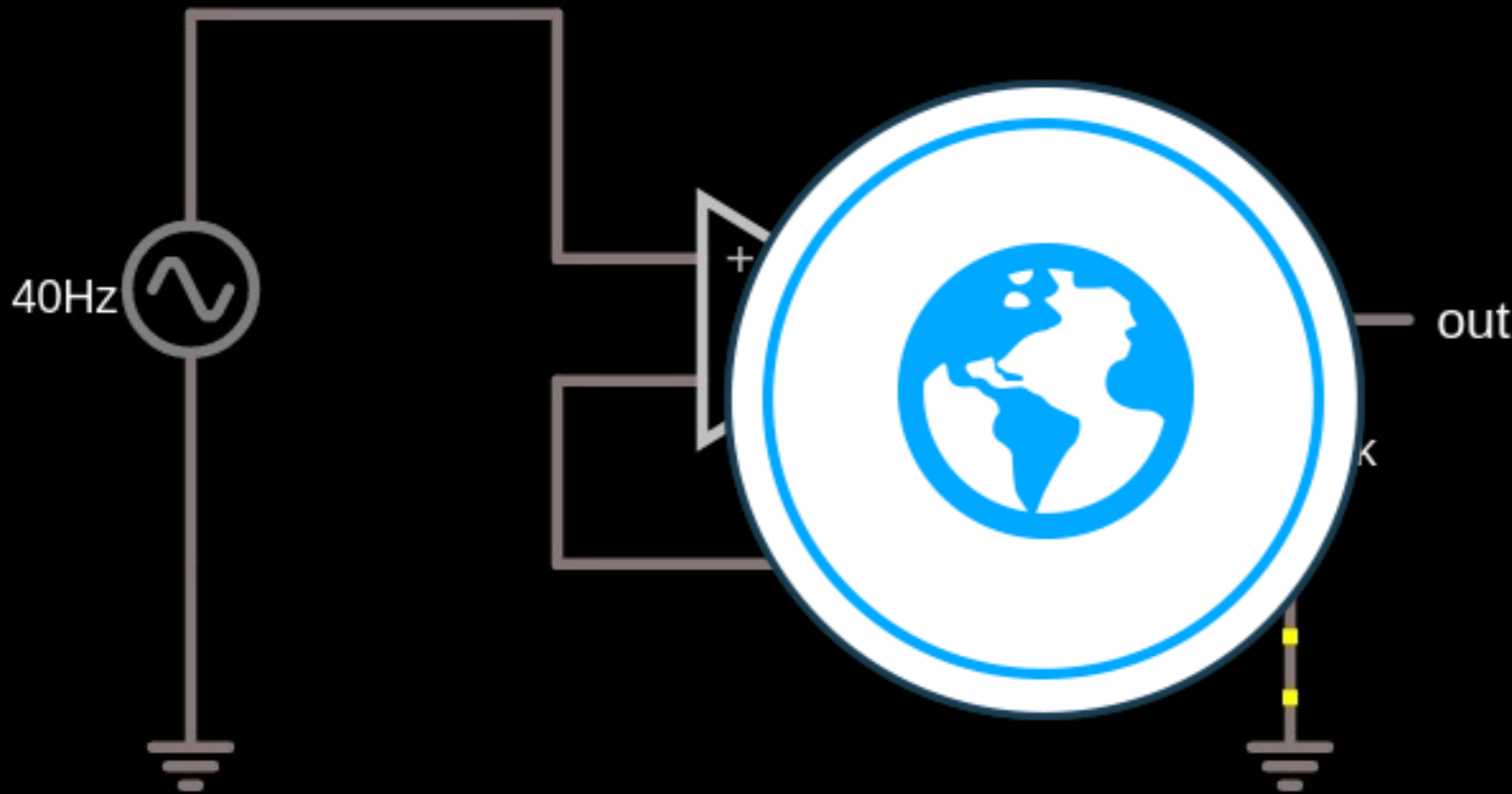
Op-Amp Buffer



$V_{out} = V_{in}$
Einangrar áhrif álags



OP AMP Buffer



Reset RUN / Stop

Simulation Speed < [Slider] >

Current Speed < [Slider] >

Power Brightness < [Slider] >

Current Circuit:



EMS Contract Manufacturer

Submit Your BOM For A Free DFM Analysis On Your Electronic Assembly | Chat With Sales Now

Levison Enterprises

<http://tinyurl.com/ya4kp3k9>



Parið saman inngang og útgang við rétta lýsingu á impedance/viðnám miðað við Buffer OP-AMP

Útgangur

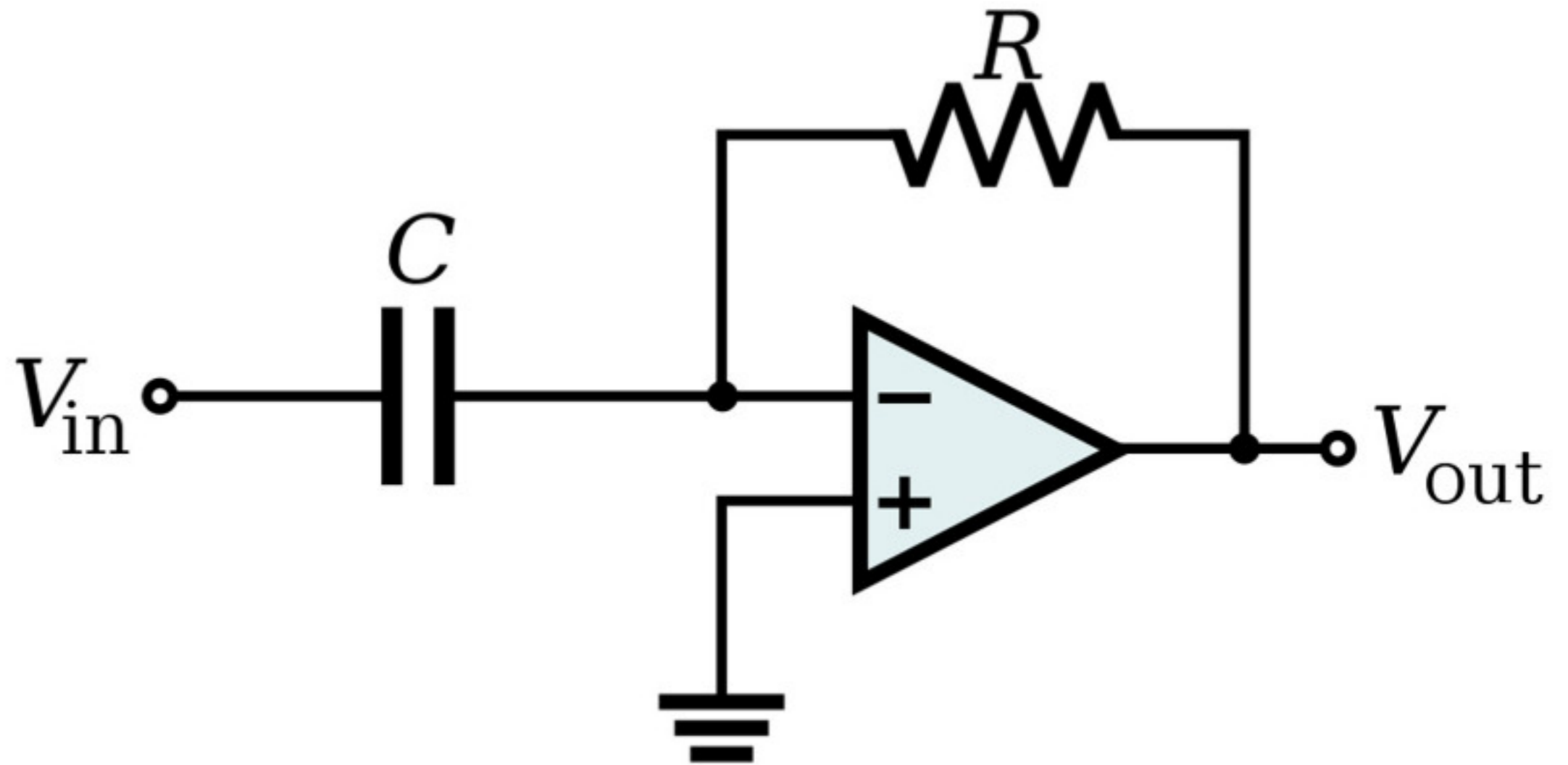


Inngangur



Matching Pairs

Op-Amp Differentiator „Diffrun reikniaðgerð”



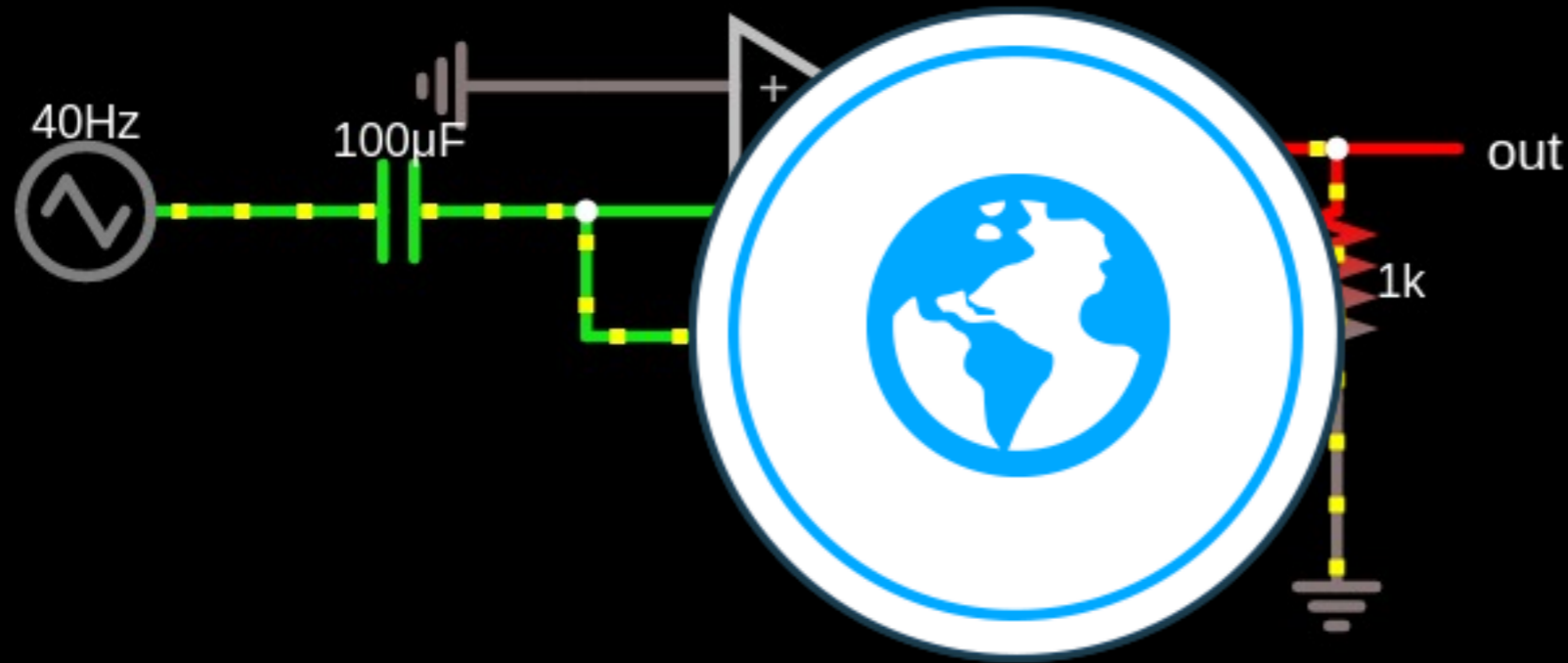
$$V_{\text{out}} = -RC \frac{dV_{\text{in}}}{dt}$$

Fallið $f(x) = x^3$ þá hefur það afleiðuna $f'(x) = 3x^2$

Reset RUN / Stop

OP AMP Differentiator

Simulation Speed
Current Speed
Power Brightness



Current Circuit:



EMS Contract Manufacturer

Electronic Assembly:
SMT, Through Hole,
PCBAW, Wire Harness,
Full Enclosure, Turn Key

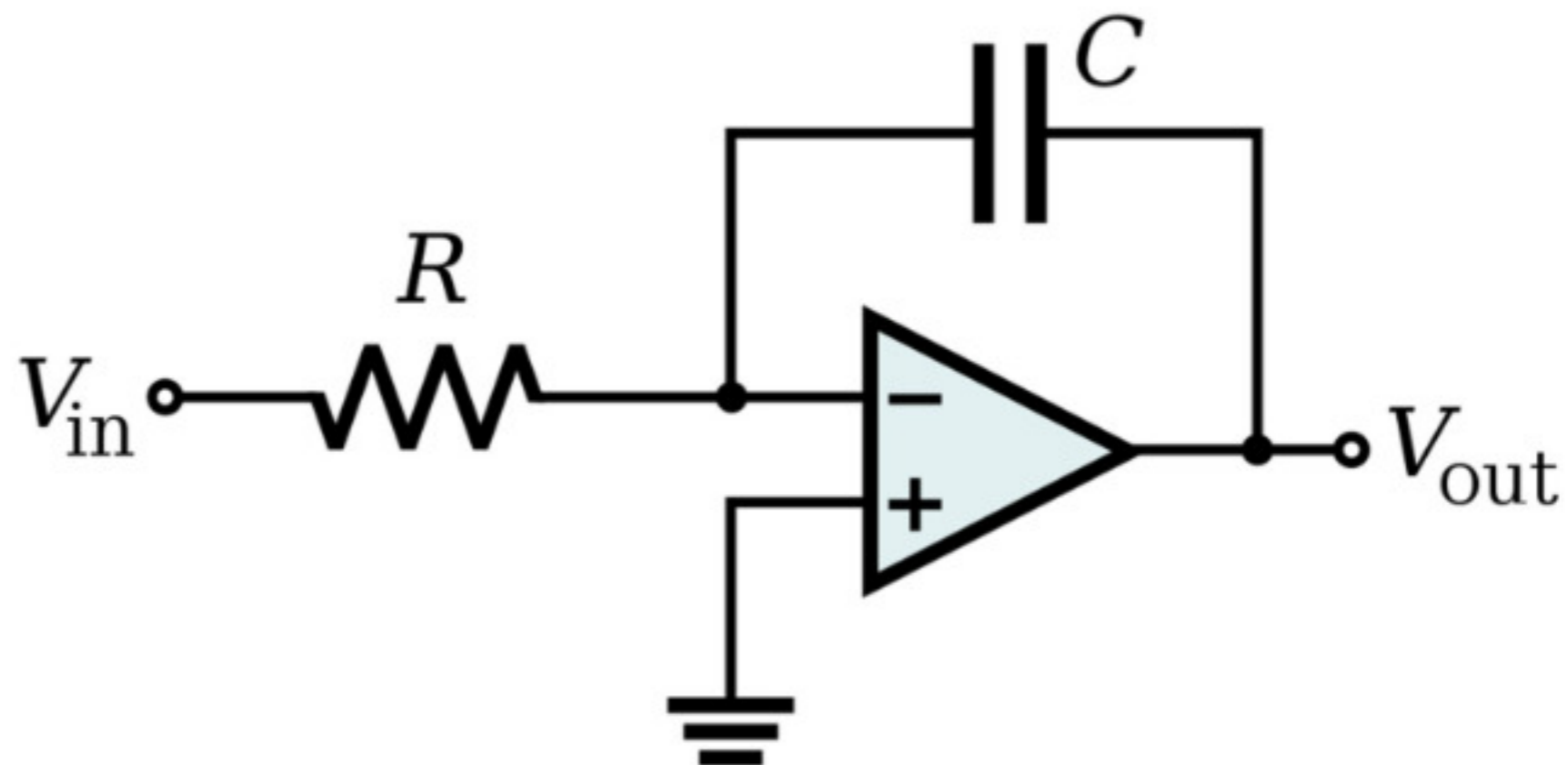
Levison Enterprises

<http://tinyurl.com/yd4blo8a>



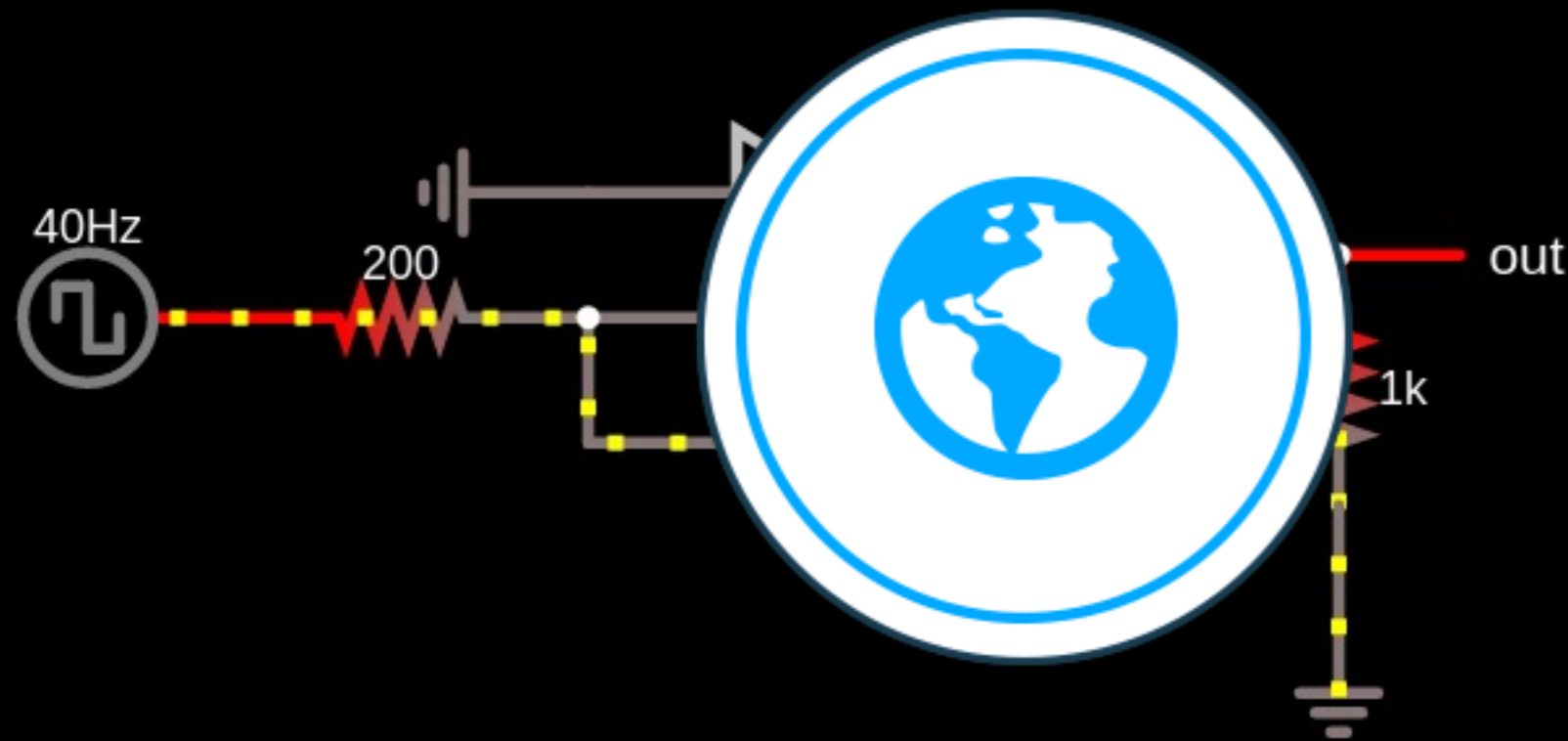
Op-Amp Integrator

„Tegrun eða heildun reikniaðgerð“



$$V_{\text{out}} = - \int_0^t \frac{V_{\text{in}}}{RC} dt + V_{\text{initial}}$$

OP AMP Integrator



Reset RUN / Stop

Simulation Speed < [Slider] >

Current Speed < [Slider] >

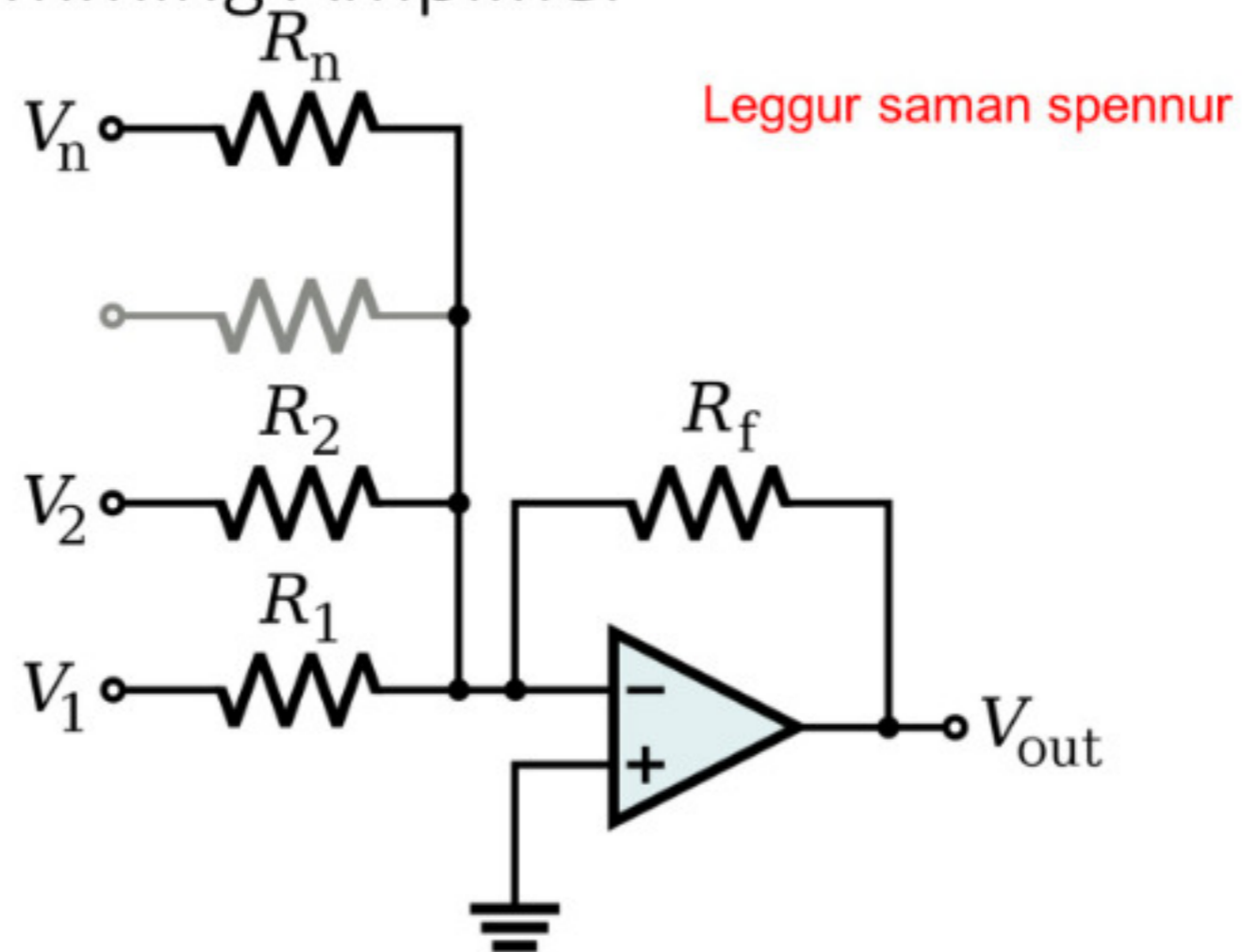
Power Brightness < [Slider] >

Current Circuit:

<http://tinyurl.com/ydcucfy8>

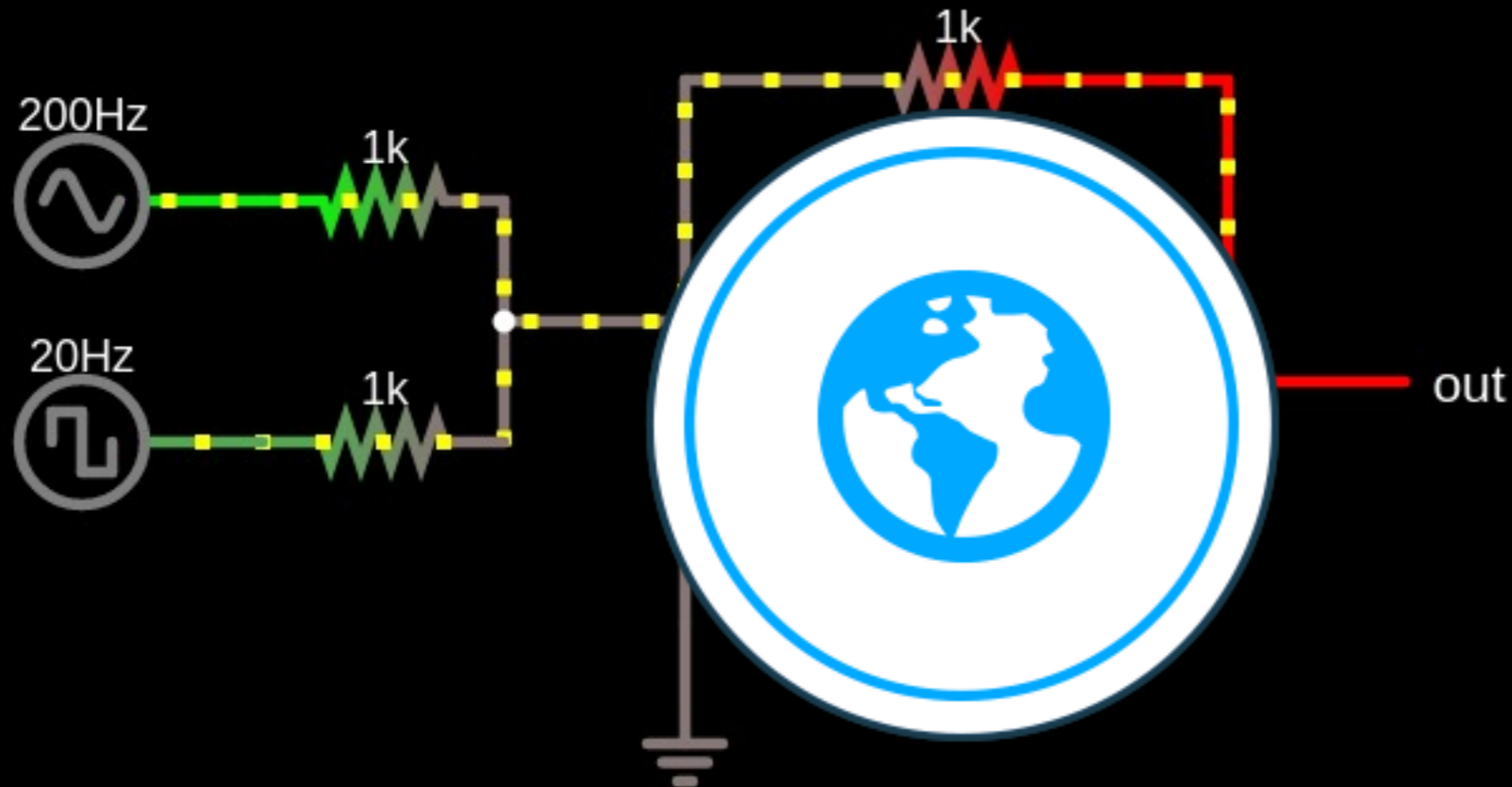


Op-Amp Summing Amplifier



$$V_{\text{out}} = -R_f \left(\frac{V_1}{R_1} + \frac{V_2}{R_2} + \dots + \frac{V_n}{R_n} \right)$$

OP AMP summing



Reset RUN / Stop

Simulation Speed < [Slider] >

Current Speed < [Slider] >

Power Brightness < [Slider] >

Current Circuit:

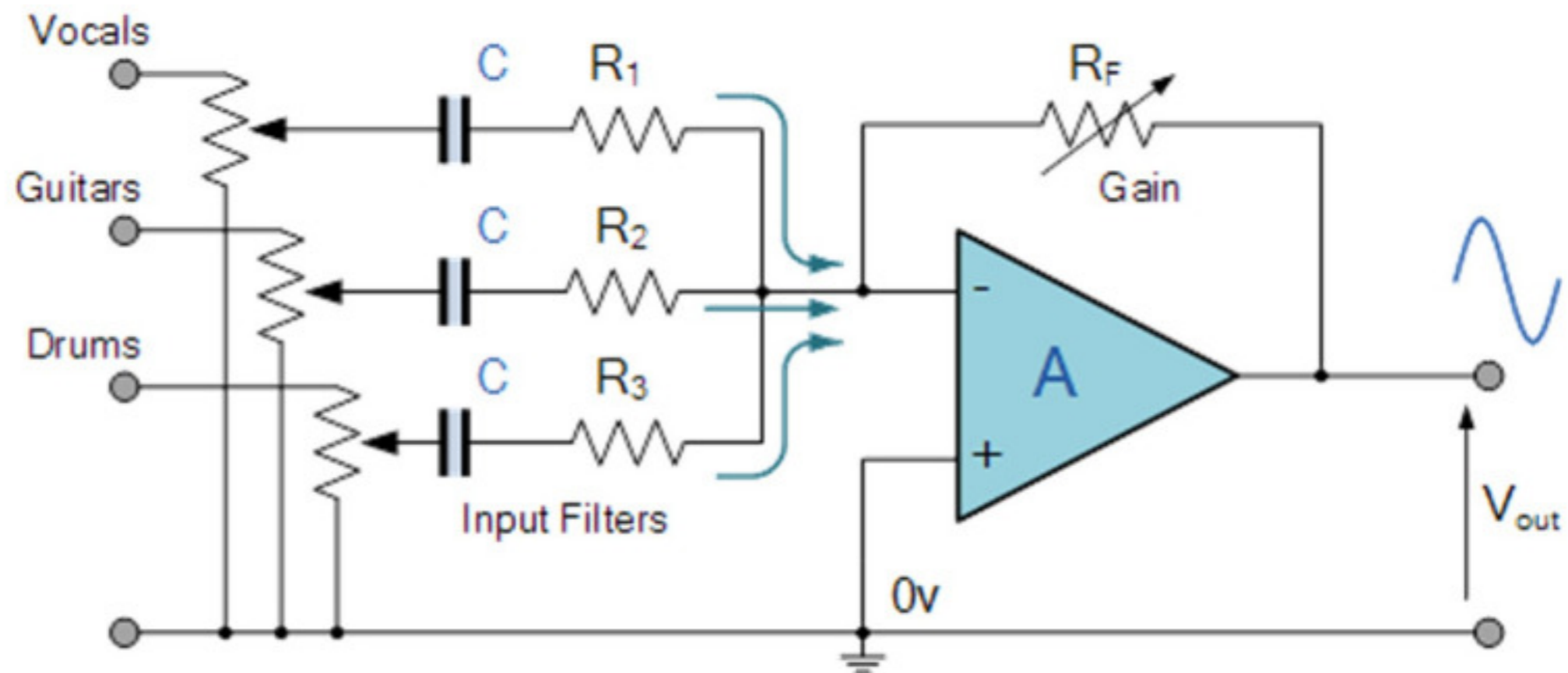
<http://tinyurl.com/y8qo9q3r>



Op-Amp Summing Amplifier

Leggur saman spennur

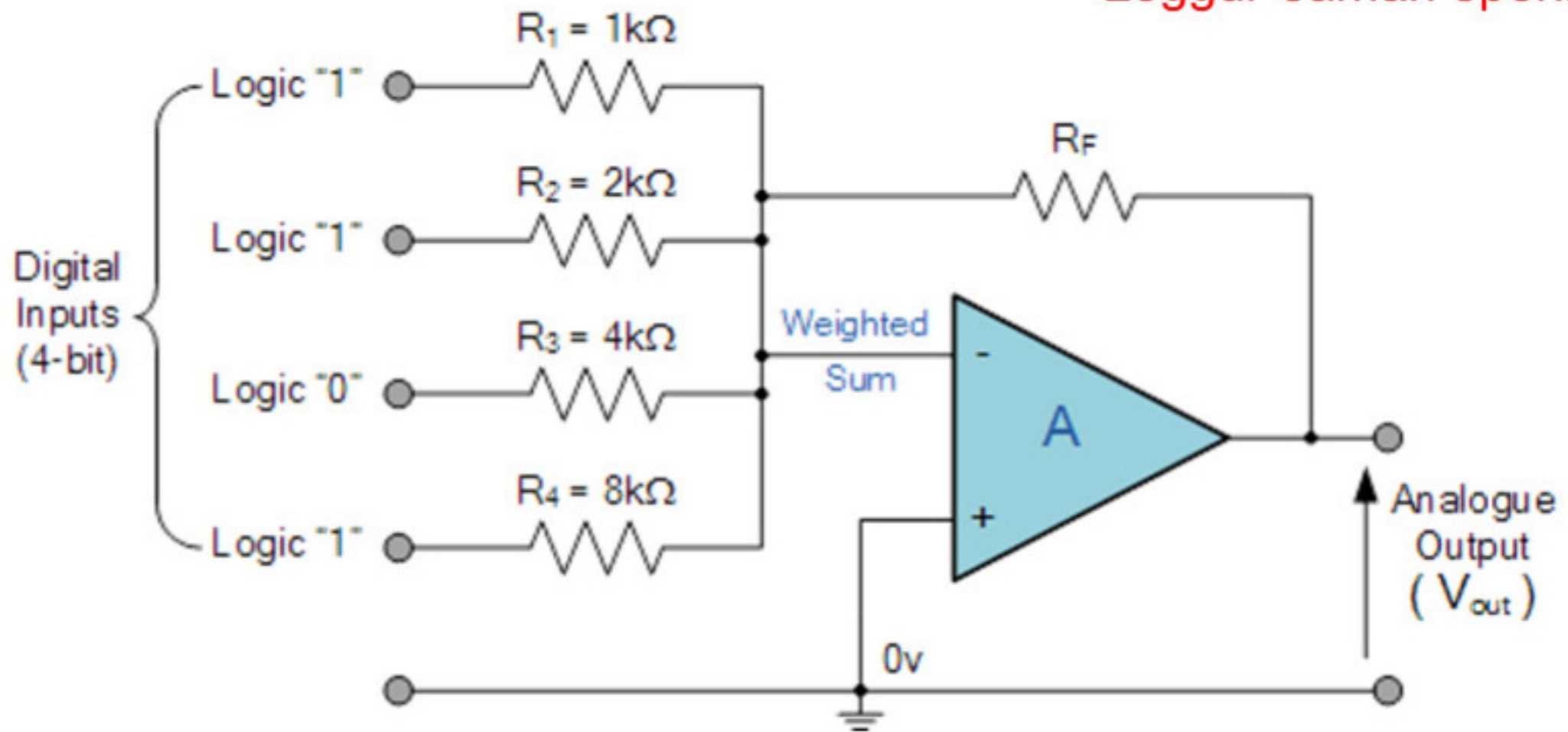
Mixer



Op-Amp Summing Amplifier

Digital yfir í analog breyta „converter”

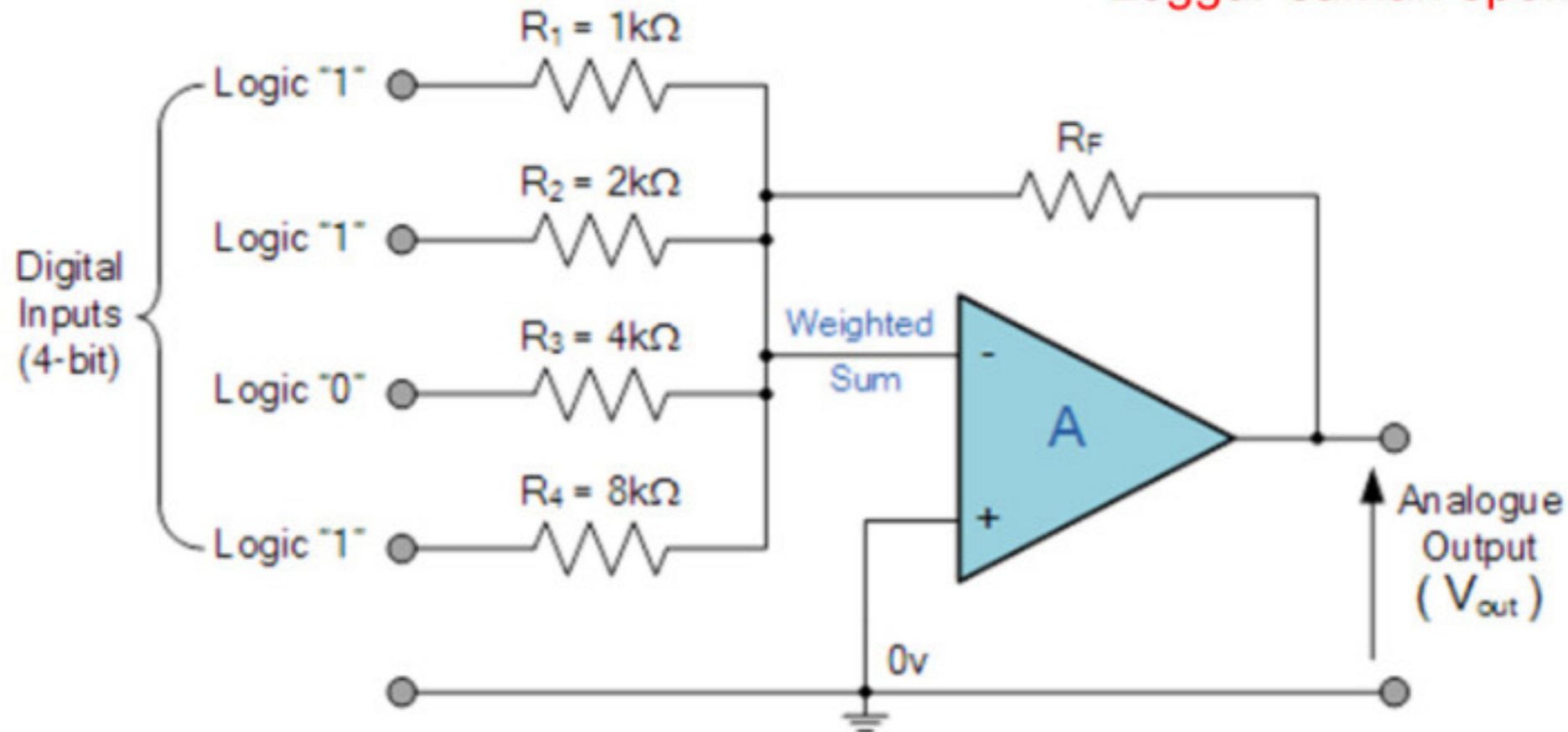
Leggur saman spennur



Op-Amp Summing Amplifier

Digital yfir í analog breyta „converter”

Leggur saman spennur

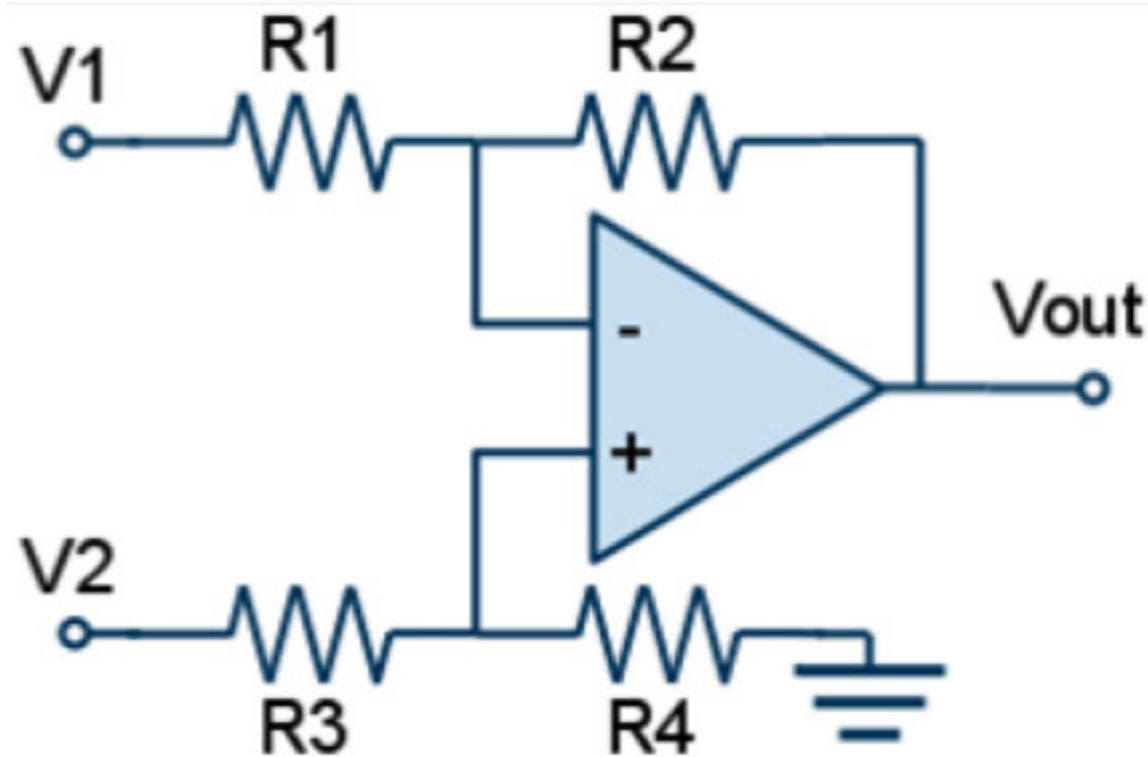


$$V_{out} = -R_f \left(\frac{V_1}{R_1} + \frac{V_2}{R_2} + \dots + \frac{V_n}{R_n} \right)$$



<http://tinyurl.com/yxxq6ofm>

Differential OP



$$V_{out} = \left(1 + \frac{R_2}{R_1}\right) \left(\frac{R_4}{R_3 + R_4}\right) * V_2 - \left(\frac{R_2}{R_1}\right) * V_1$$

If $R_1 = R_3$ and $R_2 = R_4$ Then

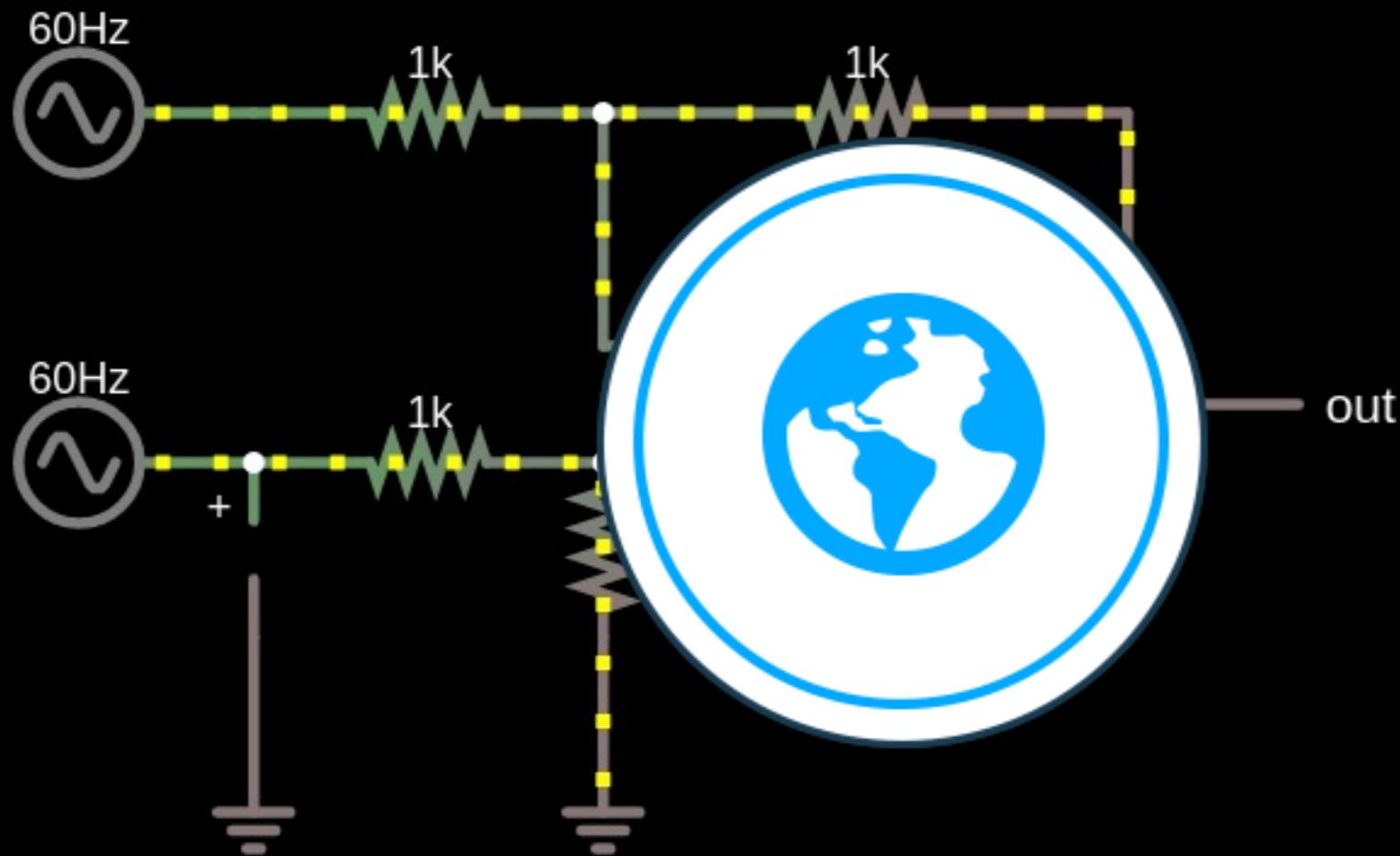
$$V_{out} = \left(\frac{R_2}{R_1}\right) (V_2 - V_1)$$

Mismunamagnari (Differential Amp)

Simulation Speed

Current Speed

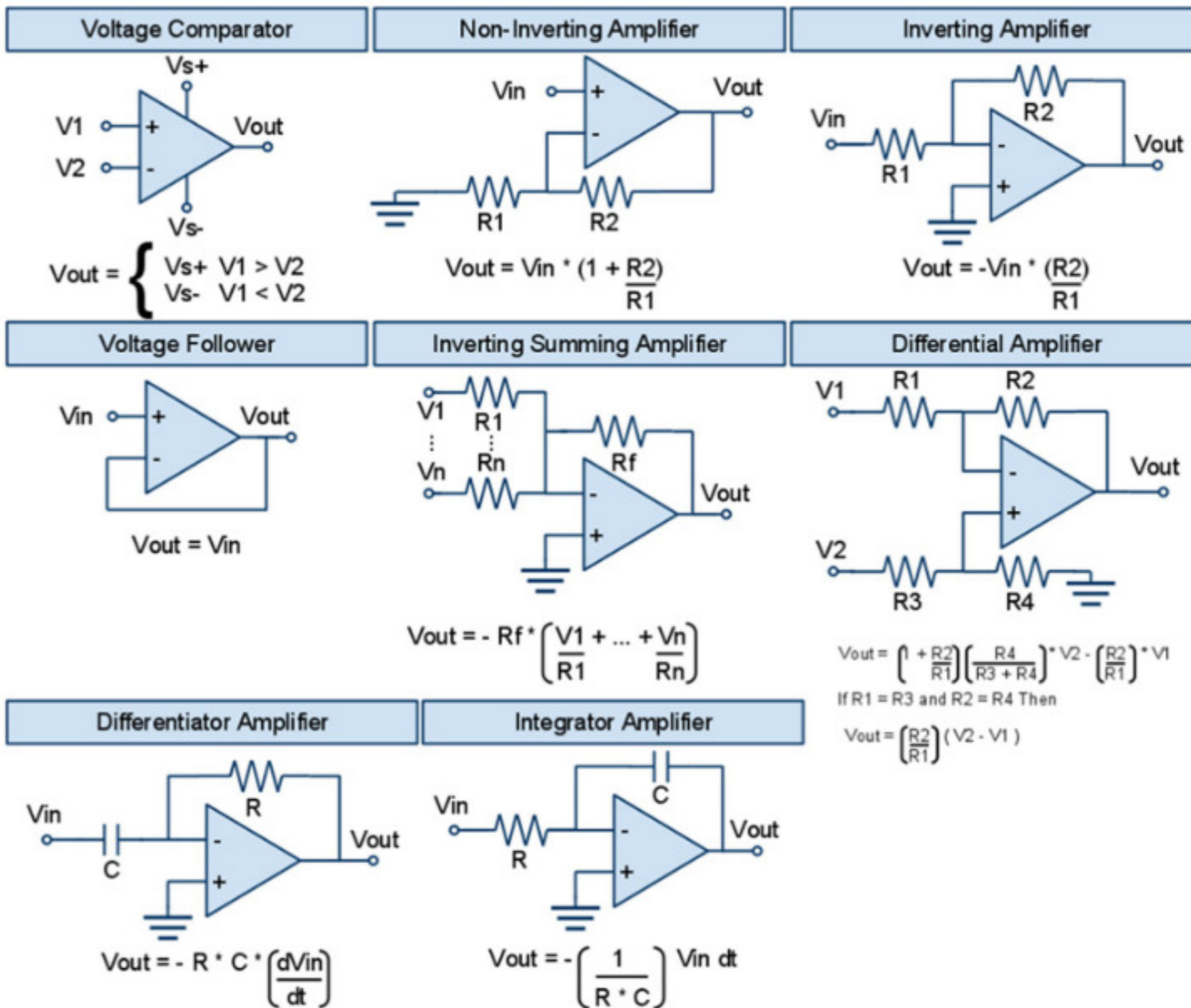
Power Brightness



Current Circuit:

<http://tinyurl.com/ycvvgg745>





The grid contains the following content:

- Top-left:** A voltage follower circuit diagram with the equation $V_{out} = V_{in}$.
- Top-right:** A differential amplifier circuit diagram with the equation $V_{out} = \begin{cases} V_{s+} & V_1 > V_2 \\ V_{s-} & V_1 < V_2 \end{cases}$.
- Bottom-left:** An inverting summing amplifier circuit diagram with the equation $V_{out} = -R_f \left(\frac{V_1}{R_1} + \dots + \frac{V_n}{R_n} \right)$.
- Bottom-right:** An integrator circuit diagram with the equation $V_{out} = - \left(\frac{1}{R \cdot C} \right) V_{in} dt$.

A blue overlay with an apple icon and the letter 'a' is positioned over the center of the grid.

Matching Pairs