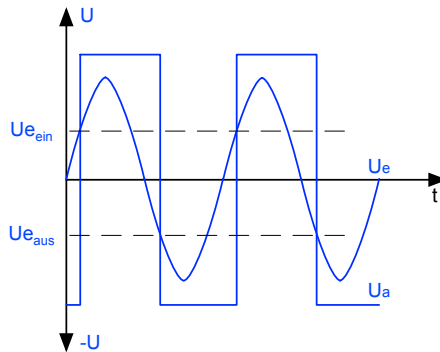
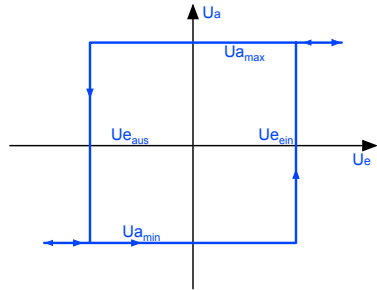
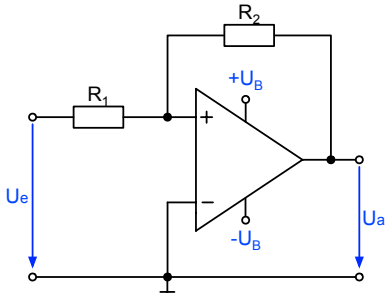


# Kippschaltungen

## Schmitt-Trigger

$U_H$ : Hysteresespg. [V]

Nichtinvertierender Verstärker

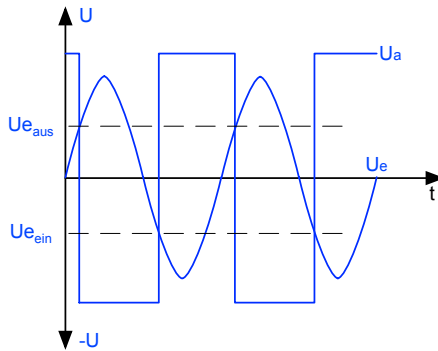
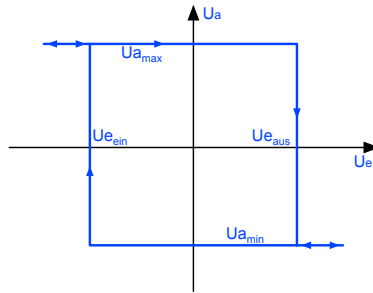
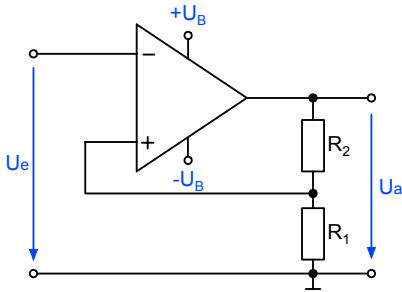


$$U_{e_{\text{ein}}} = \frac{R_1}{R_2} \cdot U_{a_{\text{min}}}$$

$$U_{e_{\text{aus}}} = \frac{R_1}{R_2} \cdot U_{a_{\text{max}}}$$

$$U_H = \frac{R_1}{R_2} \cdot (U_{a_{\text{max}}} - U_{a_{\text{min}}}) = U_{e_{\text{ein}}} - U_{e_{\text{aus}}}$$

## Invertierender Verstärker



$$U_{e\text{ein}} = \frac{R_1}{R_1 + R_2} \cdot U_{a\text{min}}$$

$$U_{e\text{aus}} = \frac{R_1}{R_1 + R_2} \cdot U_{a\text{max}}$$

$$U_H = \frac{R_1}{R_1 + R_2} \cdot (U_{a\text{max}} - U_{a\text{min}}) = U_{e\text{ein}} - U_{e\text{aus}}$$