In[1]:= Needs["Quantum`Computing`"]

In[149]:= circuitexpr := H₁
QuantumPlot[circuitexpr]
QuantumPlot3D[circuitexpr]
TraditionalForm[QuantumEvaluate[circuitexpr]]
TraditionalForm[QuantumTableForm[circuitexpr]]
QuantumMatrixForm[circuitexpr]

 $\begin{array}{ll} & \text{In}[155] \coloneqq \text{ circuitexpr } := C^{\{\hat{2}\}} \left[\mathcal{NOT}_{\hat{3}} \right] \cdot C^{\{\hat{1}\}} \left[\mathcal{NOT}_{\hat{2}} \right] \\ & \text{ QuantumPlot}[\text{circuitexpr}] \\ & \text{ QuantumPlot3D}[\text{circuitexpr}] \\ & \text{ TraditionalForm}[\text{QuantumTableForm}[\text{circuitexpr}]] \\ & \text{ QuantumMatrixForm}[\text{circuitexpr}] \end{array}$

$$\begin{split} & \text{In[118]:= circuitexpr := } C^{\{\hat{2}\}} \left[\mathcal{NOT}_{\hat{3}} \right] \cdot \mathcal{Y}_{\hat{2}} \cdot C^{\{\hat{1}\}} \left[\mathcal{NOT}_{\hat{2}} \right] \cdot \mathcal{H}_{\hat{3}} \cdot \mathcal{X}_{\hat{2}} \cdot \mathcal{H}_{\hat{1}} \\ & \text{QuantumPlot[circuitexpr]} \\ & \text{QuantumPlot3D[circuitexpr]} \\ & \text{TraditionalForm[QuantumTableForm[circuitexpr]]} \end{split}$$