

Table 1: Feedback Control Policies Comparison

Controller	State/Output	Static/Dynamic	Deterministic/Random
LQR	State	Static	Deterministic
LQG	State	Dynamic	Deterministic
P-Control	Output	Static	Deterministic
PI-Control	Output	Dynamic	Deterministic
Q-Learning	Output	Dynamic	Randomized
Finite State Controller	Output	Static	Randomized

Finite state controller is randomized if the transitions from each node are determined by a probability distribution conditioned by the observation. However, if the state transitions are deterministic then the whole finite state controller is deterministic.

An important observation is that state feedback is a special case of output feedback where your outputs give you full state information.