

Current State	Event			Next State
INIT	k_pacingMode == 0 or 2 or 4			A_CHARGING
	k_pacingMode == 1 or 3			V_CHARGING
	NOT(k_pacingMode == 0 or 1 or 2 or 3 or 4 or 5)			---
A_CHARGING	m_pushButton == true			A_CHARGING
	m_pushButton == false			---
	k_pacingMode == 0	After(k_atrPaceDelay)		A_PACING
		NOT(After(k_atrPaceDelay))		---
	k_pacingMode == 1			V_CHARGING
	k_pacingMode == 2	m_atrCMPDetect == true	After(k_arpDelay)	A_CHARGING
			NOT(After(k_arpDelay))	---
		m_atrCMPDetect == false		---
	k_pacingMode == 3			V_CHARGING
	k_pacingMode == 4	After(k_pacingAVDelay)		V_PACING
NOT(After(k_pacingAVDelay))		---		
A_PACING	After(k_atrPulseWidth)			A_CHARGING
	NOT(After(k_atrPulseWidth))			---
V_CHARGING	m_pushButton == true			V_CHARGING
	m_pushButton == false			---
	k_pacingMode == 0			A_CHARGING
	k_pacingMode == 1	After(k_ventPaceDelay)		V_PACING
		NOT(After(k_ventPaceDelay))		---
	k_pacingMode == 2			A_CHARGING
	k_pacingMode == 3	m_ventCMPDetect == true	After(k_vrpDelay)	V_CHARGING
			NOT(After(k_vrpDelay))	---
		m_ventCMPDetect == false		---
k_pacingMode == 4	After(k_atrialEscapeInterval)		A_PACING	
	NOT(After(k_atrialEscapeInterval))		---	
V_PACING	After(k_ventPulseWidth)			V_CHARGING
	NOT(After(k_ventPulseWidth))			---

INIT

ENTRY:

%Open all switches so no current flow

A_CHARGING

ENTRY:

%Charge the capacitor and rectify the atrial pace

A_PACING

ENTRY:

%Pace the atrium

V_CHARGING

ENTRY:

%Charge the capacitor and rectify the ventricular pace

V_PACING

ENTRY:

%Pace the ventricle

$$k_pacingAVDelay \text{ \{uint16\} } - p_fixedAVDelay - p_atrPulseWidth$$

$$K_atrialEscapeInterval \text{ \{uint16\} } - ms/beat - k_pacingAVDelay - p_ventPulseWidth$$