QSafe

# An Electronic Safe application based on the Quantum Platform Framework

## Overview

QSafe is a simple implementation of an Electronic Safe much like those found in hotel rooms to help guests keep their valuables secure while not in their rooms (Figure 1). More importantly the QSafe application was created to take a simple real-world device and model it’s control software as a hierarchical state machine (HSM) using the Quantum Framework. The foremost purpose of this exercise was to familiarize one’s self with the Quantum Platform’s methodology, and framework.



Figure - Prototype Electronic Safe

Features (<http://www.amsecusa.com/hotel-safe.htm>)

Some of the main features of the safe are described below;

Convenient motorized locking system incorporating the latest technology.  
  
Easy to read, large LED display let's you know the status of the safe.  
  
4 digit combination, standard hotel room configuration (customer sets new combination every time safe is used, quickly & easily).  
  
Safe Runs on 4-AA batteries. If batteries go dead, each safe has a by-pass power cable (9v battery required).  
  
Lock-out penalty. If the combination is entered wrong, the safe will lock up for 15 minutes, frustrating would-be burglars.

Electronic override can be set by security personnel.

Heavy duty steel construction offers excellent burglary protection.

Convenient motorized locking system, incorporating the latest technology.

Easy to read, large LED display let’s you know the status of the safe.

4 digit combination, standard hotel room configuration (customer sets new combi-nation every time safe is used, quickly and easily), or electronic credit card.

Reliable ADA approved keypad.

Electronic override can be set by security personnel.

Runs on 4 AA batteries. If batteries should go dead, each safe has a by-pass power cable (9v battery required).

Lock-out penalty if the combination is entered wrong, the safe will lock up for 15 minutes, frustrating the would-be burglar.

Spacious interior fits most lap top computers.

Two anchor holes with mounting hard-ware included.

Attractive carpeted bottom hides anchor bolts.

Electrostatic powder-coated finish in an attractive cream color.

Guest instruction label included.

Packaged for UPS shipment.