Automated Biometric Pill Dispenser

Abstract: An Automated Biometric Pill Dispenser is developed to ensure secure and error-free administration of prescribed medication. The device incorporates fingerprint recognition circuitry, linking it to a central medication database. By using biometric authentication, authorized users can access their prescribed pills conveniently and reliably, eliminating the need for a manned pharmaceutical counter.

Introduction: The Automated Biometric Pill Dispenser addresses the challenges of overloaded pharmaceutical counters and prescription drug abuse. It achieves this through a compact and lightweight design, biometric access control, and real-time updates to the medication database.

Working Principle: The device operates in two stages: enrollment and medication dispensing. During enrollment, patients register their fingerprints, creating new entries or deleting existing ones. In the medication dispensing stage, authorized users place their thumb on the fingerprint scanner. After verification, the dispenser releases the prescribed pills based on the patient's prescription information retrieved from the database.

Conclusion: The Automated Biometric Pill Dispenser offers a practical solution for secure medication storage and dispensing. By integrating fingerprint authentication and a centralized medication database, it ensures safe administration, reduces the risk of drug abuse, and provides convenient access to prescribed medication. This device benefits hospitals and individuals by improving medication management and eliminating the need for a manned pharmaceutical counter.

The Automated Biometric Pill Dispenser provides a compact and reliable solution for secure medication administration. By incorporating fingerprint recognition and a centralized medication database, it ensures safe access to prescribed pills, reduces the risk of prescription drug abuse, and eliminates the need for a manned pharmaceutical counter. This cost-effective device is accessible to users of all ages, can be deployed in both rural and urban areas, and offers real-time updates to the medication database for efficient management. Overall, it improves medication safety, convenience, and accessibility, benefiting both hospitals and individuals.