

FACIAL RECOGNITION

A facial recognition device is a device that takes an image or a video of a human face and compares it to the other images in a database. When using facial recognition, several pictures of the subject must have been taken at different angles and usually with different facial expressions then stored in a database

In the security system, the facial recognition section is the first section to perform its functions as it is always running because the section of the system will always be on. The cameras could be positioned at specific areas and at time of verification and identification, the subject stands in front of the camera for a few seconds and then the face is scanned after which the image is compared to those that have been previously recorded.

Thus, if the subject's face has been registered on the system like that of the owner, it will compare the image to the ones in the database and find a match. When this system finds a match and recognizes the face, nothing really happens.

However, if the subject's face has not been registered on the security system and it runs a scan on the face, it doesn't match any of the image faces in the database. This causes the system to either sound an alarm or send a notification to the owner of the security system with the application deployed on his mobile phone.

The owner sees a video of the unknown face that his security system has captured where he makes a decision to either turn off the alarm or call the subject (if known) to tell them how the system works and how to disable or unlock it.