

Installation of Japan's first iris recognition system

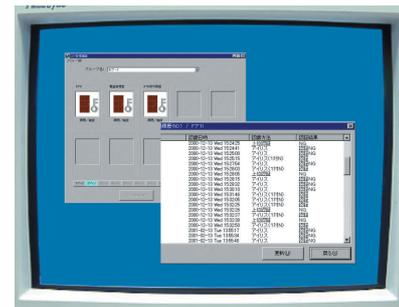
## Iris Recognition Access Control System — Sagawa Express Co., Ltd. in Japan



The iris camera automatically captures the pupils of the eyes when a person stands facing it. Identification is completed without touching anything.



Access and entry status can be displayed by control data on a PC.



Iris recognition system user access history log.



The Sagawa Chubu Hub Center, Japan's large-scale cargo assembly station connecting east and west.

Sagawa Express Co., Ltd. with "Swiftness, Accuracy, Courtesy" as motto, is a comprehensive physical distribution company that provides transport service for a wide variety of goods ranging from personal home packages to business shipments. The Chubu Hub Center in Komaki City, Aichi Prefecture, because it handles shipments from a wide area as way station for the entire nation, is proud of its position as No. 1 in the company in terms of volume.

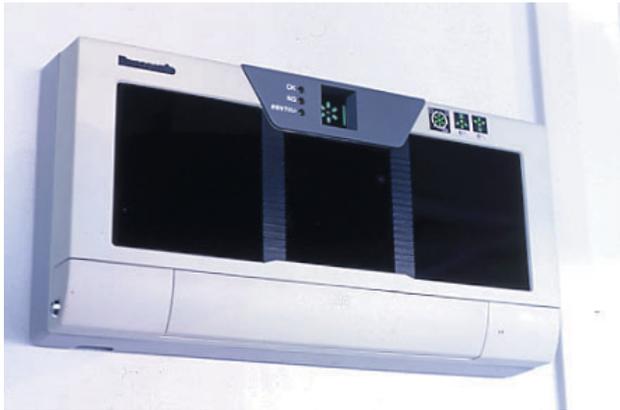
To provide strict control of persons entering and leaving the strong room, on the occasion of the renewal opening of the Chubu Hub Center in October, 2001, an iris recognition access control system was installed for the first time in Japan. With the construction of this system, the center now provides even more accurate security to protect customer cargo.

**Client** : Sagawa Express Co., Ltd.  
**Deliver to** : Chubu Hub Center, Sagawa Express Co., Ltd.  
**Address** : 1350 Mitsubuchi Sosaku, Komaki City,  
Aichi Prefecture  
**Delivery Date** : October, 2001



### System Outline

During the time cargo is being kept in the center, cargo designated as "valuables" is stored in a strong room with an iris recognition camera installed at the entrance. The camera captures the iris pattern of the eyes of a person standing at the entrance and the door opens only when the iris pattern matches a previously registered pattern. Even if the person seeking admittance is carrying a lot of baggage, since it is hands-free, this security system contributes to work efficiency.



"One glance" automatic iris recognition system.

## Features of the System

### The iris facilitates high-precision identification of living organisms

The iris is a protected internal organ inside the eyeball, a disc shaped thin membrane with a sinew on the surface. The sinew pattern is complicated and differs with each eye, even in the same individual. Usually the pattern is fixed by about the age of two and doesn't change throughout the individual's life, so the probability of one individual being mistaken for another is one in 1,200,000 and thus makes it a high-precision individual recognition measurement. In the distribution center where a great number of people come and go, identification by means of the iris pattern implements high level security.

### The camera automatically focuses on the eyes and makes identification without making contact

The iris identification camera is equipped with a mechanism to automatically determine the location of the iris without making contact; by simply standing in front of the camera the individual is automatically recognized. Iris data is taken up by an installed video camera and comparison is made with previously enrolled data. Since persons working at the distribution center frequently are carrying packages, hand-free recognition is very efficient. Also, since compared to the fingerprint system used up until now the time taken to take off gloves is saved and mistaken identification through changes in fingerprints because of wear and tear is avoided, work can proceed smoothly.

## Principal Equipment Installed

Iris Recognition Camera Unit	2
Control Unit	2
Electric Lock Connection Unit (Local Supply)	1
Motor Operated Lock (Local Supply)	1

## The Customer's Voice

*"The system not only protects the valuable cargo of our customers, it is also user-friendly for those working at the center."*

Located as it is in Komaki City which is situated roughly in the center of the Japanese archipelago, the Chubu Hub center, in its role as a way station collecting shipments from the entire country, continues to systematize and has undergone a renewal project. At times among the cargo entrusted to the center there are items that are designated as "valuable items." Expensive jewelry, irreplaceable memorabilia, etc., requested to be treated as "valuable items" are all kept temporarily in a strong room. Not only is entry into the strong room limited and careful attention given to security of the cargo stored there, the necessity of taking measures to prevent possible unforeseen mishaps in advance is strongly felt. The center is in operation 24 hours a day and at peak times when shipments are dispatched, as many as 200 people come and go. Since it isn't possible to scrutinize the faces of such a staff of workers, it is possible for people to enter the center without being noticed. For this reason, at the time of renewal we became very interested in the iris recognition room access system that is capable of high precision identification of individuals. The decisive points in making the selection were capacity of the camera to identify by capturing a person's iris and reliable follow-up support.

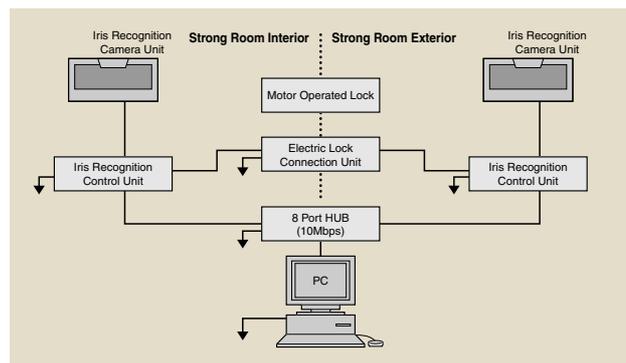


Sagawa Express Co., Ltd.  
Head Office, Sales Div.,  
Transport Service  
Development Dept.  
Chubu Hub Center  
Center Head:

**Toshiaki Okazaki**

With the fingerprint system used previously there were identification deterioration factors such as sweat from the hands and fingerprint wear and tear as well as the time factor when staff had take off gloves, but with "iris" the identification can be made without the hands touching anything so there is no problem even when carrying packages. Also, in contrast to the rigorous image associated with surveillance and security, identification by the iris leaves a favorable impression. We are very pleased to have been able to present the latest advancement in security system technology by being the first to install the system in Japan. We have great expectations for the future.

## System Diagram



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**System Solutions Company**  
**Matsushita Communication Industrial Co., Ltd.**  
 4-3-1, Tsunashima Higashi, Kohoku-ku, Yokohama,  
 223-8639, Japan  
 Tel 81 (0)45-540-5769  
 Fax 81 (0)45-540-5773  
 URL  
<http://www.mci.panasonic.co.jp/english/prdct/cctv/index.html>

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