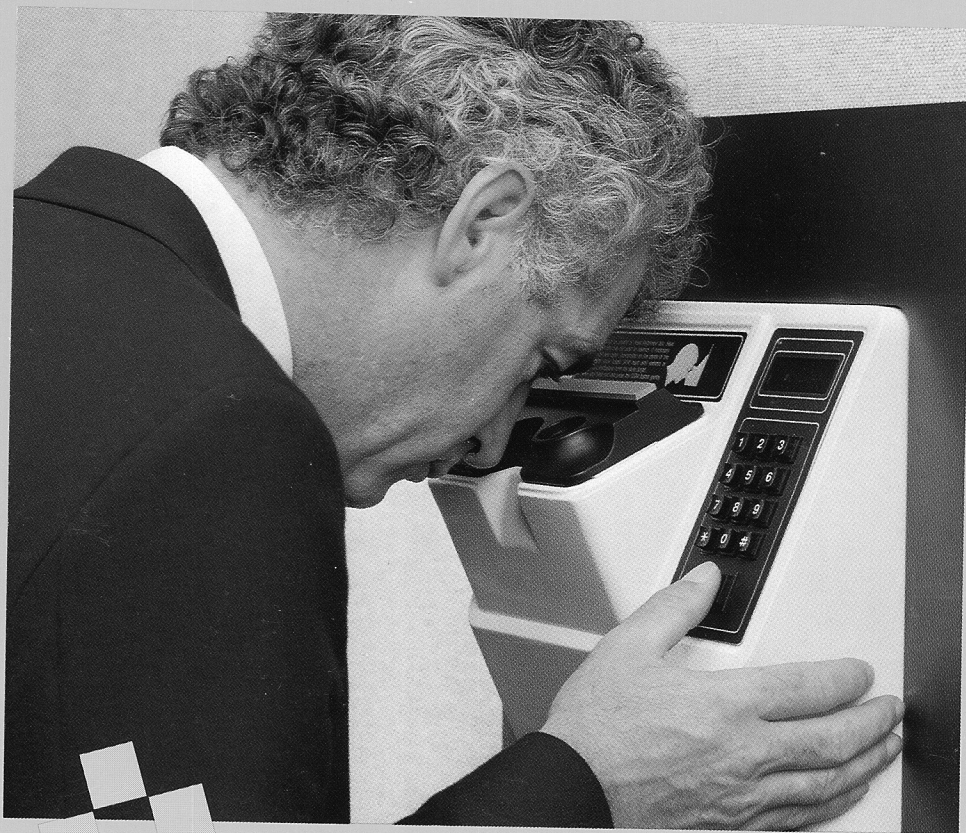


# The Ultimate In Positive Identification



Eye  Identification System 7.5™

eye  identify inc.

*In security environments that demand positive identification of persons seeking access, the EyeDentification System 7.5 delivers unparalleled performance.*

With the EyeDentification System 7.5, each individual is identified by a biological trait that goes beyond even the fingerprint in its uniqueness and stability: the retinal blood vessel pattern of the eye.

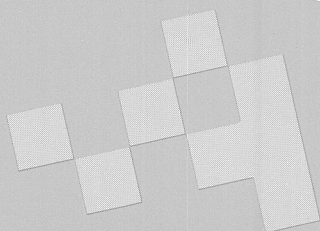
eye—which must be focused for identification to occur—there is virtually no possibility of indiscriminate or fraudulent use. With the 7.5, your facilities are positively protected against unauthorized access—quickly, safely, with a level of accuracy that far exceeds other available systems.

*Advanced technology assures high performance.*

The EyeDentification System 7.5 incorporates precision optics, an electronic controller, and two RS-232 ports—one to connect the display

In the *Recognition* operating mode, the waveform created by an access-attempt eye scan is compared with all the eye signature templates stored in memory, and the person is allowed or denied access depending on whether or not a match exists.

In the *PIN Verification* operating mode, the waveform created by an access-attempt eye scan (taken after a PIN is entered) is compared only with



Every person—even an identical twin—has a widely divergent, unalterable retinal eye pattern. Through precision optics and sophisticated computer technology, the 7.5 is able to “read” an individual’s retinal eye pattern and distinguish it from all others with an accuracy unmatched by any other personal identification technology.

*The 7.5 offers unparalleled accuracy.*

In the PIN Verification mode, the chance of the 7.5 accepting an imposter is just one in a million. Using two eyes to verify identity, the chance of false acceptance is reduced to an incredible one in a trillion.

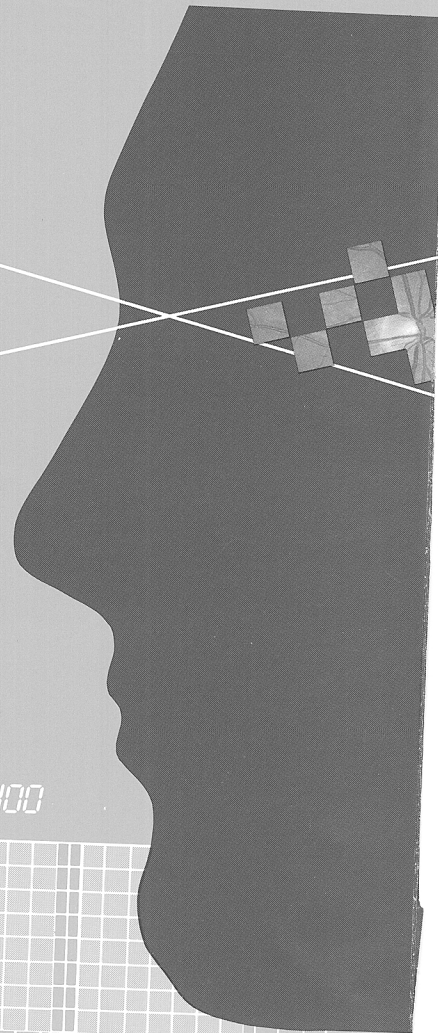
Equally impressive false acceptance error rates can also be achieved in the Recognition mode, depending on the number of enrollees and the degree of sensitivity you wish to program into the system.

And, because the EyeDentification System 7.5 relies solely on the human

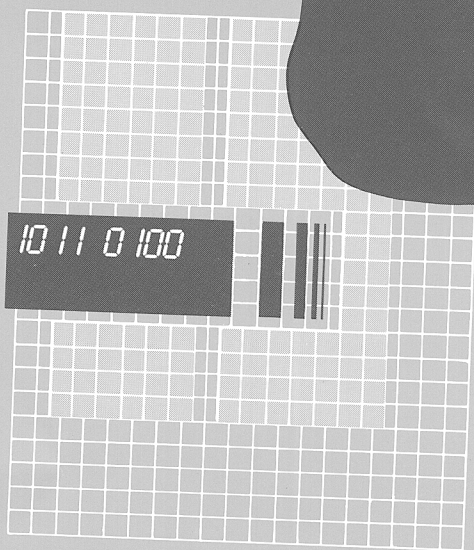
terminal; the other to interface with a printer, a host computer or other peripheral equipment. A fast Fourier transform algorithm processes the eye signature data for pattern recognition. A 12-digit keypad permits the optional entry of personal identification numbers (PIN). An 8-character display indicates acceptance or nonacceptance.

The system offers three operational modes: Enrollment, Recognition, and PIN Verification.

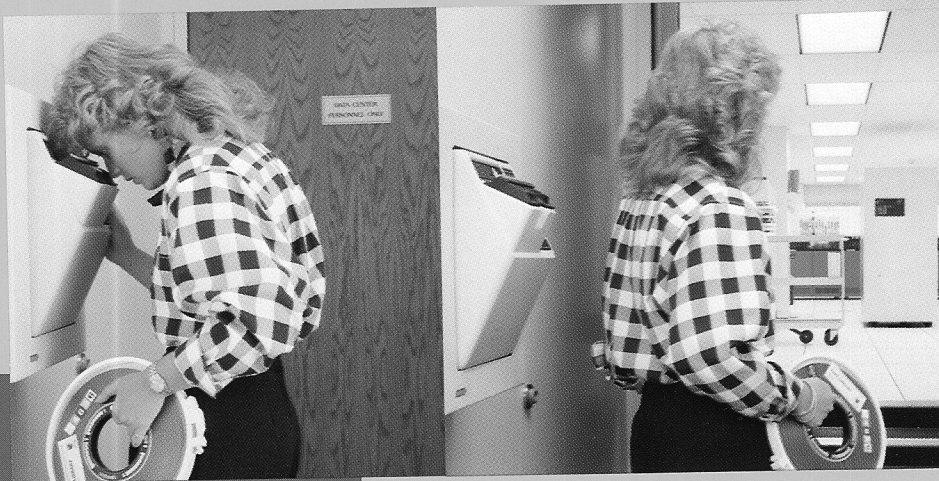
During *Enrollment*, the enrollee positions the head squarely over the 7.5, keeping the eye approximately 1/2-inch above the lens, concentrates on a visual alignment target, then simply presses a button to initiate the retinal eye scan. The system utilizes an ultra-low-intensity light source to instantaneously scan a circular area of the retina, creating a digitized waveform that is relayed to a 68000 microprocessor, where it is processed, then stored as a 40-byte eye signature template. *This one-time process normally takes less than one minute.*



10 11 0 100







*The EyeDentification System 7.5 is impressively fast.*

In the PIN Verification mode, with 1,200 eye signatures on file, memory search and eye signature verification takes about 1.5 seconds.

In the Recognition mode, with 250 individuals enrolled, the search and recognize process is accomplished in less than 3 seconds.

Total throughput time—from the moment an enrollee addresses the 7.5 to the point at which release of the security mechanism is activated—averages less than 7 seconds.

With just a quick look and the press of a single button, the 7.5 provides fast, easy access for your personnel. No fumbling with keys. No forgotten cards. *No unauthorized persons allowed.*

*Complete safety is assured.*

The EyeDentification System 7.5 has been thoroughly tested and found to meet or exceed all applicable health and safety standards.

- Emitted light levels are many orders of magnitude below the levels of safety established by the American Conference of Governmental Industrial Hygienists and recommended by the U.S. Food and Drug Administration

- UL-listed Access Control System Unit (UL file #BP4293)
- Satisfies FCC Class A and VDE 0871 Class B Electromagnetic Interference specifications

*The flexibility to fit your needs.*

The EyeDentification System 7.5 can be operated in stand-alone configuration or easily integrated into a network of units reporting to a host computer or existing security system.

A standard, system-compatible RS-232 display terminal, available from EyeDentify, Inc. or through a third-party vendor, is the only add-on equipment required.

As many as 1,200 eye signatures can be stored in the standard non-volatile bubble memory of the system. By interfacing with a host computer on a stand-alone or network basis, the memory storage capacity of the system can be expanded to meet the needs of any organization.

The 7.5 also features time zone control, system management program control, error count with audible alarm, and real-time logging or transactional storage for maximum control in high security environments.

*Ask for a demonstration today.*

The EyeDentification System 7.5 is now proving its superior speed and reliability in a variety of high-security environments, including financial institutions, computer facilities, defense contractors, aerospace and military installations, and nuclear materials sites.

To find out how our system can better protect your facilities, just call or write. We'll be happy to provide complete technical specifications and a demonstration of the EyeDentification System 7.5's incomparable capabilities.



the eye signature template associated with that PIN in memory, and access is allowed or denied depending on whether or not a match exists.

When the system confirms an eye scan signature as that of an authorized enrollee, it automatically activates release of the security mechanism involved.

**EyeDentification System 7.5™**  
*The Ultimate in Positive Identification.*

## System Features

- Three operating modes: Enrollment; Recognition; PIN (Personal Identification Number) Verification
- Operates as a stand-alone system, as a network of units reporting to a host computer, or as a value-added component to an existing security control system
- Nonvolatile data base storage with memory capacity to 1,200 enrollees
- Download capability: data base backup for eye signature files
- Time zone control: 4 time zones, 7 days within each time zone with 4 user-definable start/stop times per day
- System management program control (CRT lock) prevents unauthorized users from altering system configuration
- Error count with audible alarm
- 12-digit keypad capability for PIN Verification mode
- 8-character display indicates acceptance or nonacceptance of enrollee
- Real-time logging: name, reason for acceptance or nonacceptance, time and date are listed on printer
- User-definable accept/reject threshold settings\*
- Nonvolatile transactional memory storage
- Tamper alarm
- Rugged, attractive, tamperproof aluminum housing
- Available in desktop, surface-mount, or through-wall-mount models

\*Accept/reject threshold settings can be permanently set by the factory at customer request.

## Operating Specifications

**Enrollment time:** Less than 1 minute

**Machine Processing Time:**

**Verification Mode:** 1.5 seconds

**Recognition Mode:** Less than 3 seconds with 250 enrollees

**Average throughput:** 4 to 7 seconds

**False-accept error rate:** One-in-one-million in PIN verification mode

**I/O data path to host:** RS-232

Terminal port fixed at 9,600 baud;

Auxiliary port = 300 - 19,200 baud

**Eye signature data structure:** 40 bytes (320 bits) per eye in PIN Verification mode; 72 bytes (576 bits) per eye in Recognition mode

## Electrical Requirements

**Operating voltages:** 115v AC  $\pm$  10% (Optional 230v AC)

**Frequency range:** 50 - 60 Hz

**Fuse protection:** Resettable circuit breaker

## Physical and Environmental Characteristics

**Size with desk-mount base:** (Standard from factory)

Width = 12.2" (30.5 cm)

Height = 15.0" (38.0 cm)

Depth = 8.0" (20.3 cm)

With removal of desk-mount base, unit can be surface-mounted or recessed 3 inches (7.6 cm) into a wall.\*

Total protrusion, surface-mount = approximately 10.75" (27.3 cm)

Total protrusion, recessed-wall-mount = approximately 5" (12.7 cm)

(Recessed installations require through-wall mounting for access to rear panel.)

\*Requires optional mounting brackets from factory

**Net unit weight:** 26 pounds (11.8 kg)

**Shipping weight:** 32 pounds (14.5 kg)

**Shipping size** (Overall carton dimensions):

Width = 18.8" (47.8 cm)

Height = 17.5" (44.5 cm)

Length = 22.0" (56.0 cm)

**Operating temperature range:** 0° to 40° C

**Storage temperature:** 0° to 50° C

**Humidity:** To 100% noncondensing

## Disclaimers:

Patents for components of the EyeDentification System 7.5 are issued or pending in the U.S.A. and in 18 free-world countries.

EyeDentify, Inc. reserves the right to change or improve the product and to alter specifications and prices without notice. The company assumes no liability as to the intended use of its products, although it has made every effort to ensure the accuracy of this information and of possible applications of the products.

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