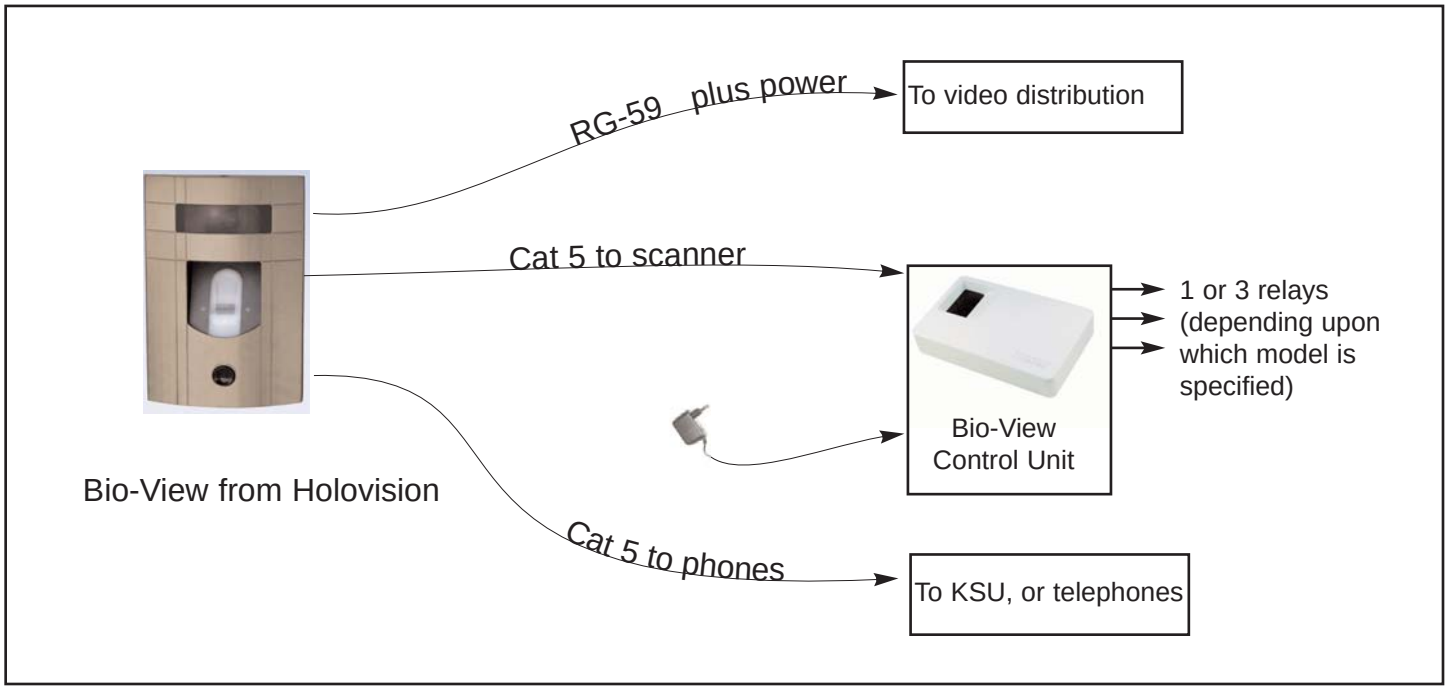
1. Wiring Layout for Bio-View



2. Introduction to Bio-View Stand-alone Access Control Systems (SA1 and SA3)

Holovision's **SA1** and **SA3** biometric access system is designed to control:

- Access through doors equipped with electronic strikes, electric locks, maglocks, etc.
- Operation of alarm systems configured with momentary key-switch
- Garage or gate operator operated by an electric opener
- Any device that is operated by an on/off switch

Holovision's Bio-View eliminates the need for memorizing access codes, or carrying keys, cards, or fobs.

In a typical installation, (depending upon which system is installed) one, two, or three fingers can be used as shown in this example:

- First Finger controls an electric strike
- Second Finger controls arming/disarming of an alarm system
- Third Finger disarms the security system, and sends a silent duress signal.

3. Integration

Basic Relay Monitoring - the system being controlled monitors the relay for a momentary change in status between open and closed.

4. Basic Operation - Access Control

Enrollment - This is a one-time procedure for each user. This involves swiping finger over the Bio-View scanner to extract and store a binary code template that represents the fingerprint's unique biometric signature. No image is stored in the scanner.

Identification - This step involves a user swiping his/her finger over the outside scanner. The binary template of the fingerprint is matched against stored information, and access is granted or denied.

5. System Specifications

Access Control

Finger Capacity - 99 fingers

Maximum number of scanners - 1

Model SA1 - 1 relay NO, NC. Activates for 1-60 seconds
Model SA3 - 3 relays NO, NC. Activates for 1-60 seconds

Time Schedules - None. All users have access all of the time

6. Hardware Description - Access Control

QTY	DESCRIPTION	PICTURE
1 per system	***Fingerprint Scanner - (used for enrollment & authentication)*** • Is an outside unit that has dual purpose: a) user enrollment; b) user authentication • It should be installed in a location that is visible and easy accessible to users. • The unit is spray-waterproof, and as such the mounting location should provide adequate protection against heavy rain, snow, showers, and intense sunshine exposure. • To ensure proper operation of the fingerprint scanner, it should be installed at the proper height from the ground to the center of the 400 series rough-in box (50"). • The fingerprint scanner is connected to the control unit by 4 conductors (2 data and 2 power). Data and power conductors should not be run in the same cable. Please refer to the wiring diagram for more info.	
1 per system	***Control Unit – (used for relay control and programming)*** • Is an inside unit that has dual purpose: a) system programming; b) relay control • It should be installed away in a separate and controlled location to prevent tampering. • The control unit can be order with 1 or 3 contact closures. • The control unit provides contact closures with normally open and normally closed relays (NO and NC) • For the system with 3 relays (SA3): Each relay is controlled by different finger that is assigned during the enrollment process of the finger. A single scanner control all relays. Only one scanner can be connected to the control unit. • Each relay can be connected to any electrical device or lock such as door strike, magnetic lock, garage door, etc. (Note: these are not supplied by Holovision)	
1 per system	***Power Supply –*** • The system is shipped with a 9 VAC power supply. • Power is applied to the Control Unit (inside unit). • Fingerprint Scanner (outside unit) is powered by the control unit (inside unit) using 2 conductors cable. Data and power conductors should not be run in the same cable. •If battery operation is desired, the system can operate on regulated 12 VDC. 12VDC power supply is not included.