

SUPERVISOR 2000-LG

Product Name

Supervisor 2000 Optical Monitor Turnstile for Bi-directional Control – Model SU-2000 LG

Manufacturer

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Product Description: The SU-2000 LG is a waist high, optical sensor monitored, barrier free passage turnstile that utilizes infrared sensors and access control contacts to provide bi-directional controlled access. To gain authorized passage through the SU-2000 LG, the user must present a valid card to the access control system. Upon presentation of a valid card, the SU-2000 LG will allow the user to pass through the turnstile in the direction requested. The SU-2000 LG utilizes multiple transmit / receive infrared sensors mounted inside the turnstile cabinets to detect passage and LED light boards consisting of red, yellow, and green LED arrays to indicate turnstile status and, upon card presentation, whether access has been granted or denied.

Electrical Requirements and Product Features: The following are the electrical requirements and standard features of the SU-2000 LG:

- **Power** – The SU-2000 LG has a standard input power requirement of 110 VAC. Primary power is stepped down and rectified for low voltage 12 VDC and 5 VDC operation. The maximum power consumption is 10 watts per turnstile.
- **Card In / Card Out Operation** – Single passage activation for either direction of operation is achieved by supplying a momentary dry contact of any duration to the SU-2000 LG. Separate terminal strip connections are provided for each controlled direction for authorized card presented and unauthorized card presented input signals.
- **Red/Yellow/Green Card Status Lights** – Red, Yellow, and Green LED arrays are configured to function in the following manner:
 - A blinking yellow LED pattern indicates the SU-2000 LG is ready for card presentation. When the blinking yellow LED pattern is illuminated, passage through the turnstile will trigger an alarm.
 - A green LED pattern sequenced toward the passage area indicates that the access system has provided the SU-2000 LG with an activation indicating that an “authorized” card has been presented. When the sequenced green LED pattern illuminates the user is allowed passage through the turnstile.
 - A red LED pattern indicates that the access system has provided the SU-2000 LG with an activation indicating that an “unauthorized” card has been presented. When the red LED pattern illuminates, passage through the turnstile will trigger an alarm.

- **Adjustable Violation Alarm** – A violation alarm located within the SU-2000 LG cabinet indicates that an unauthorized user has passed through the turnstile. The duration of the alarm is user configurable and can be set to sound continuously until manually reset or for a user defined timed duration ranging from 2 to 8 seconds. Dipswitches are provided to set the alarm to the desired duration. A keyed alarm reset is provided on the ends of the turnstile cabinets to reset the alarm when the unit is set to sound continuously.
- **Blocked Sensor Alarm** – A local alarm located within the SU-2000 LG cabinet notifies security or maintenance personnel that one or more of the SU-2000 LG optical sensors has become blocked or obstructed.
- **Passage Feedback Outputs** – The SU-2000 LG can provide two separate “feedback” signals in the form of relay outputs for each direction of operation every time a person passes through the turnstile. One output is used to indicate that an authorized entry has occurred. Another output is used to indicate that an unauthorized entry has occurred. These “feedback” signals can be integrated with the access control system to further track information regarding authorized and unauthorized entries and/or exits. Terminal strip connections are provided for this purpose.
- **Violation Alarm Output Signal** – Whenever the violation alarm sounds the SU-2000 LG provides a “feedback” signal in the form of a relay output. This “feedback” signal can be integrated with the access control system or an external auxiliary security device such as a facility alarm, CCTV system, or an electric lock controlled door to provide additional security within the facility when the SU-2000 LG turnstile is violated.
- **Field Adjustable Tailgate Detection Sensitivity** – An alarm output signal is generated if an individual attempts an unauthorized passage by tailgating behind an authorized user. Dipswitches are provided to adjust the tailgate detection sensitivity setting.
- **“Open” / “Close” Turnstile Inputs** – Activation to “open” or “close” either direction of operation is achieved by supplying a sustained dry contact to the SU-2000 LG. Separate terminal strip connections are provided for each controlled direction for both “open” turnstile and “close” turnstile input signals.
- **Adjustable Aborted Entry Reset Timer** - This option allows the operating technician to adjust the duration of the time allowed for the user to pass through the SU-2000 LG turnstile in the controlled directions. If the entry is aborted and the user does not pass through the turnstile within the time frame set, the SU-2000 LG will automatically reset and the user will need to present his card again before entering the turnstile. If the user attempts to pass through the turnstile after the time frame set has expired without presenting his card again, the violation alarm will sound. The duration of the aborted entry reset timer feature is user adjustable ranging from 5 to 20 seconds. Dipswitches are used to adjust the time duration. This option also allows the operating technician to disable the aborted entry reset timer feature if desired.

Housing:

The turnstile cabinets are constructed from formed and welded stainless steel. All exterior welds are ground smooth and polished and there are no exterior fasteners visible on the cabinet. The inside of the cabinet contains two interior anchoring holes that allow the cabinets to be installed without the use of visible anchors, bolts or fasteners.

Finishes: The SU-2000 LG is available in the following finishes:

- **Powder Coated** – Available in a wide variety of colors. Sub-assemblies are sand blasted to prepare for the powder coat finish. The powder is electrostatically applied, then baked to assure proper curing and adhesion.
- **Stainless Steel** – All external fabricated materials are composed of #304 stainless steel and polished to a #4 satin finish.

Size and Spacing: SU-2000 LG cabinets have an overall height of 37”, an overall width of 7.2”, and an overall depth of 60”. Cabinets are generally spaced 28” apart for optimal performance in standard applications, and 36” for ADA compliance.

Shipping: SU-2000 LG cabinets are shipped fully assembled for easy installation. Each cabinet includes mounting hardware (anchors, bolts, washers, etc.) to mount the unit to a standard, level concrete floor. Alvarado ships products throughout the world.

Installation: All SU-2000 LG turnstiles must be installed on a firm foundation in a manner that allows the required power and activation signal cabling to be pulled into the turnstile cabinets. The cabinets must be installed on level concrete. No embedded fasteners are needed for installation. Installation should be performed by a skilled installer following the manufacturer’s directions and instructions (supplied with the unit).

Options:

The following is a list of options that are available for the SU-2000 LG:

- **Audible Authorization Status Indicators** – A chime and / or beeper are included to function in the following manner:
 - A chime tone indicates that the access system has provided the SU-2000 LG with an activation indicating that an “authorized” card has been presented. When the chime sounds the user is allowed passage through the turnstile.
 - A beeper is used to indicate that the access system has provided the SU-2000 LG with an activation indicating that an “unauthorized” card has been presented. When the beeper sounds the user is denied passage through the turnstile.
- **Crawl Detection Sensors** – Used in conjunction with the warning alarm, additional optical sensors are provided to enhance the range of detection and prevent individuals from obtaining unauthorized passage by crawling through the SU-2000 LG turnstile.
- **“Open” / “Close” Turnstile Overrides** – A keyed override allows the operating technician to override the access control system and “open” or “close” one or both directions of the SU-2000 LG. Separate overrides are required for each direction of passage and are located locally on the turnstile cabinet. When overrides are required for both directions, the locks are keyed alike.
- **Turnstile “Open” / “Closed” Lights** – Red and green LED lights are provided to indicate whether the SU-2000 LG turnstile is “open” or “closed”. Separate lights are

provided for each direction of passage and are located on the ends of the turnstile cabinets. The “open” / “closed” lights function in the following manner:

- A green LED indicates that the SU-2000 LG is “open” for controlled or free passage through the turnstile.
 - A red LED indicates that the SU-2000 LG is “closed” and no passage through the turnstile is allowed.
- **Field Diagnostics and Passage Counts Display** – A vacuum florescent display (VFD) is mounted to the SU-2000 LG cabinet to provide field diagnostics and passage count information.
 - **Field Diagnostics** – The SU-2000 LG can be configured to automatically complete a field diagnostic test when power is supplied to the turnstile. Information regarding the alarm settings, the tailgate sensitivity setting, and the sensor checking test routine is provided on the vacuum florescent display (VFD) mounted on the SU-2000 LG cabinet. This feature provides a simple way for installers to test the functionality of the SU-2000 LG.
 - **Passage Counts** – Each passage through the SU-2000 LG generates a count. Total entry and exit passage counts are displayed together on the vacuum florescent display (VFD).
 - **Strobe Light Violation Indicators** – The SU-2000 LG can be equipped with strobe lights configured to operate in conjunction with the violation alarm to provide a highly visual indication of an unauthorized passage.

Optional Finish: The SU-2000 LG is also available in the following optional finish:

- **Corian** – Custom Corian lids are also available for use with SU-2000 LG cabinets.

Warranty: Alvarado Manufacturing Co., Inc. warrants the SU-2000 LG from defects in material or workmanship, for the period of TWO YEARS from date of shipment. Complete details of the warranty are available from Alvarado by request.

Technical Services: Technical information is available from Alvarado Mfg. Co., Inc., and its representatives, distributors and dealers.