

**DSI™**

DESIGNED SECURITY, INC.

*A Detex Company*

ES810/ES811



*\*Custom model shown*

Single Direction Optical Turnstile  
Bi-Directional Optical Turnstile

Model ES810  
Model ES811





**ES810/ES811 optical turnstiles** form pedestrian walkways to controlled areas and are typically used in upscale lobby entrances where high security, high-speed throughput and interior aesthetics are priorities.

These single or bi-directional pedestrian control devices are used with an access control system to prevent tailgating and to grant or deny access into a facility. Normally used in conjunction with a guard station, these optical turnstiles can grant access to 30 to 45 people per minute per lane. Sleek bollard designs can be surfaced to match the interior of any lobby with standard or custom designs and finishes.

In addition to custom finishes and designs a number of options and accessories are available. Any number of options can be combined to fit the individual needs of the building tenants which include visitor badge readers, voice enunciation, visitor card collector and, special reader mounting. Our most popular options include floor mounting plates. Floor plates are used in areas where core drilling is not an option.

ES810/ES811

ES820/ES821

ES831

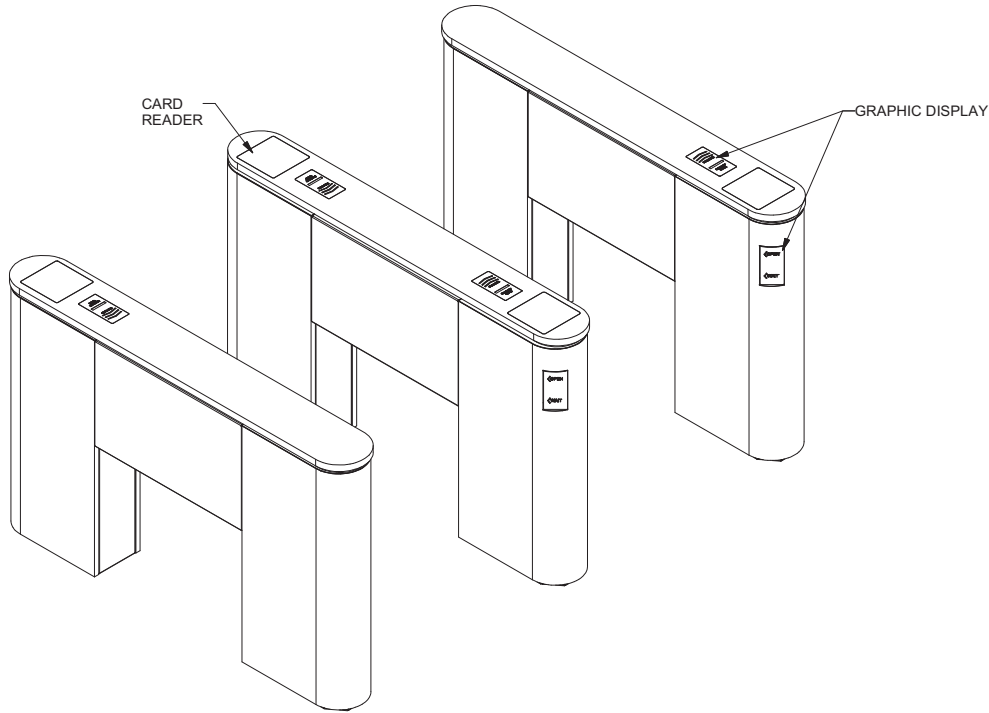
ES840

ES850

ES860

ES870

ES880



**ES811 Optical Turnstiles**

1. Determine the number of walkways required based on the desired pedestrian throughput and space availability. A conservative estimate of pedestrian throughput is 30-45 people/min, 1800-2700/hr, per walkway. This figure assumes the use of a fast response (¼ sec.) card reader system.
2. Walkway bollards should be spaced 32”-36” apart. Wider spacing results in pedestrians attempting to pass through the lane two abreast, resulting in a high incident of alarms.
3. Optical Turnstile Models:
  - a) ES810: Single direction access control (card-in/free-exit).
  - b) ES811: Bi-directional access control (card-in/card-out).

**Electrical Specifications**

- Power:** 12 VAC @ 6 Amp/walkway; transformer included
- Inputs:** N/O dry contact/card reader for valid card  
 N/O dry contact/card reader for invalid card (optional)  
 N/O dry contact to override lane operation
- Output:** N/O alarm contact for walkway violation - 500 mA @ 30 VDC  
 N/O dry contact for invalid card

**Mechanical Specifications for the Bollard**

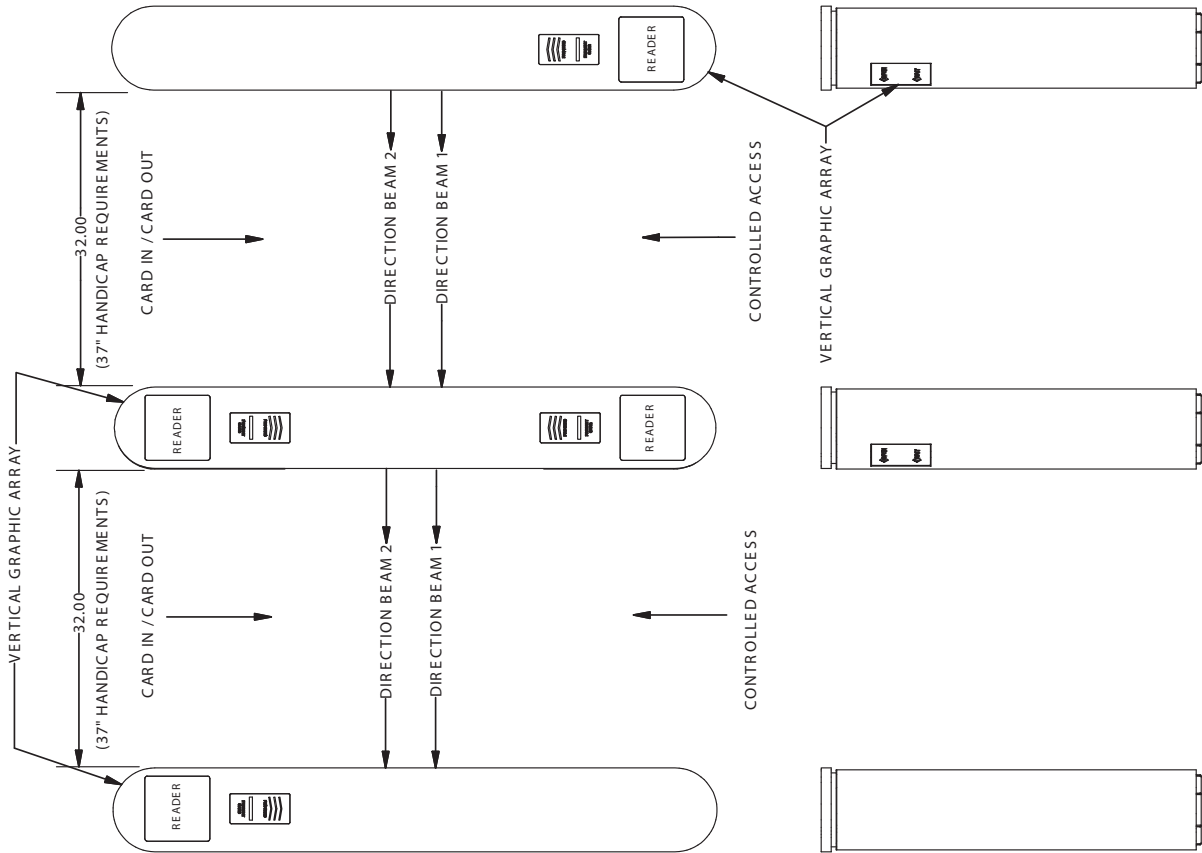
- Size:** 60”L x 38”H x 8”W
- Mounting:** 12 gauge steel base at each end with 4 - ½” mounting holes
- Finish:** Top Surface: Dupont Corian/Nevamar Fountainhead\*  
 Side Panel: Stainless steel or Nevamar Laminate over millwork\*

\* colors selected by customer

<b>DSI</b> DESIGNED SECURITY, INC.	
1402 HAWTHORNE STREET BASTROP, TX 78602 1-800-272-3555	
PROJECT: OPTICAL TURNSTILE SYSTEM ES 811 Lane Config.	
DATE: 07/15/2004	SCALE: 1/8" = 1'-0"
DRAWN BY: J. B. ANDERSON	CHECKED BY: J. B. ANDERSON
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DESIGNING AN OPTICAL TURNSTILE SYSTEM

- 1) DETERMINE THE NUMBER OF WALKWAYS REQUIRED BASED ON THE DESIRED PEDESTRIAN THROUGHPUT AND SPACE AVAILABILITY.
- 2) A CONSERVATIVE ESTIMATE OF PEDESTRIAN THROUGHPUT IS 30 PEOPLE / MIN, 1800 / HR. PER LANE. THIS FIGURE ASSUMES THE USE OF A FAST RESPONSE (1/4 SEC) CARD READER SYSTEM.
- 3) BOLLARDS SHOULD BE SPACED 30"-37" APART. WIDER SPACING RESULTS IN PEDESTRIANS ATTEMPTING TO PASS THROUGH THE LANES TWO-ABREAST, RESULTING IN A HIGH INCIDENT OF ALARMS.



ES810/ES811

ES820/ES821

ES831

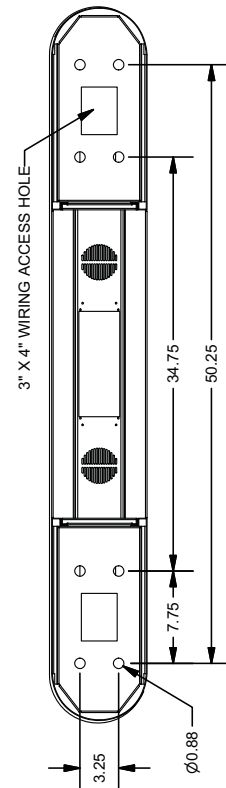
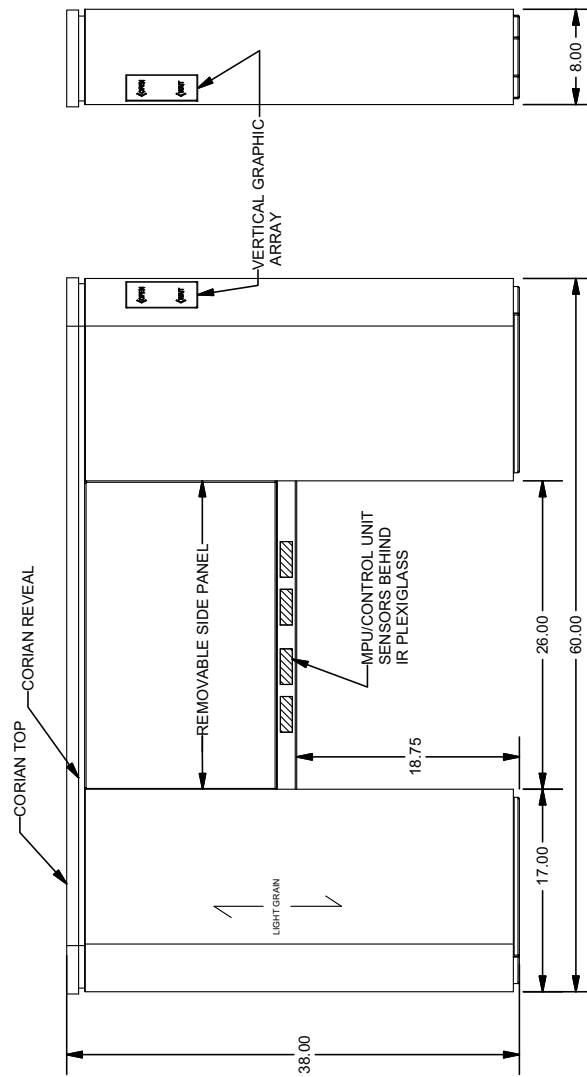
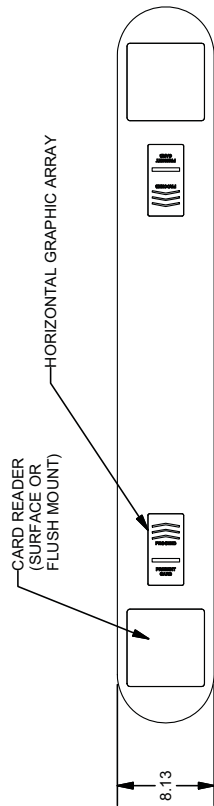
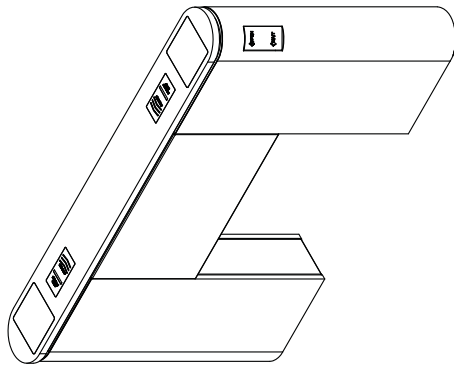
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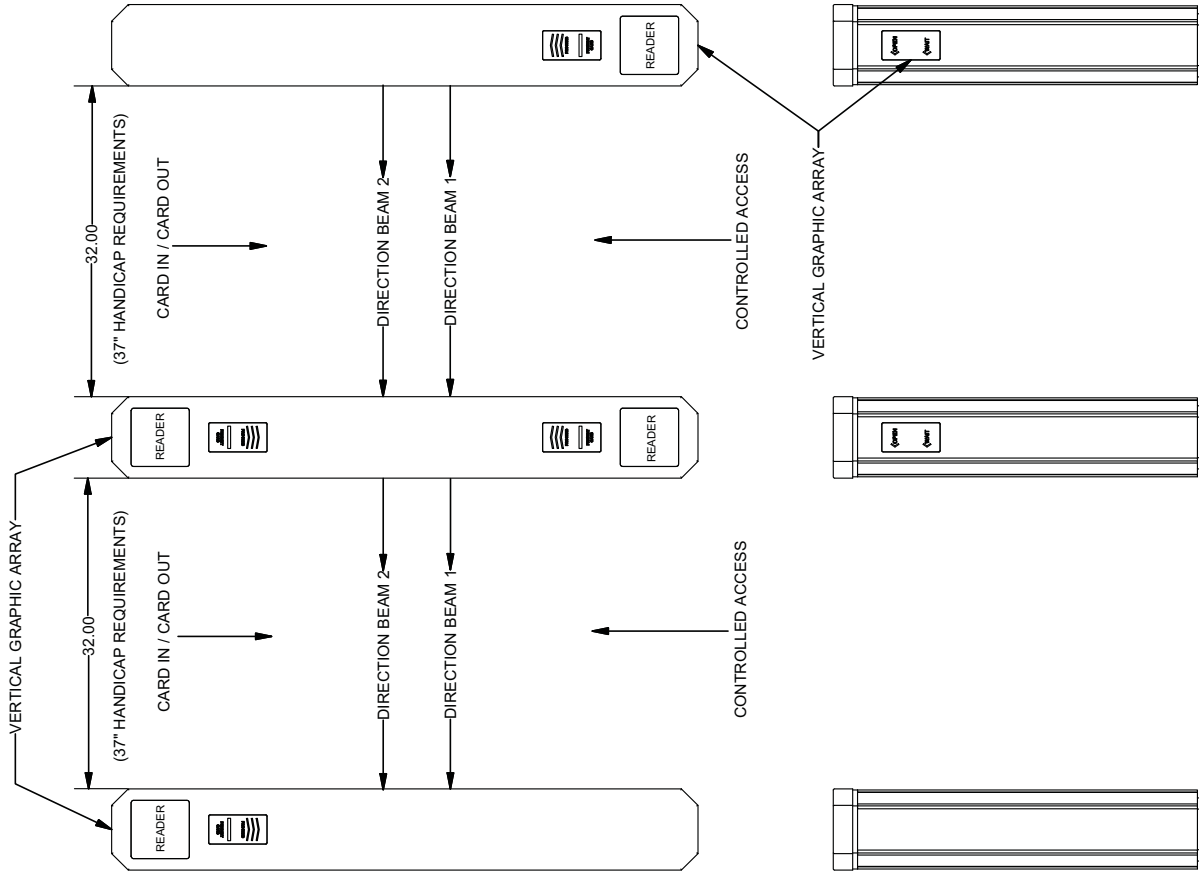


<b>DSI DESIGNED SECURITY, INC.</b>		DRAWING #	
DESIGNED SECURITY, INC. 1402 HAWTHORNE STREET.		ES 811 SS Details	
BASTROP, TX 78602 1-800-272-3555		PROJECT	
OPTICAL TURNSTILE SYSTEM		ES 811 SS	
MATERIAL		FINISH	
14 GA. STAINLESS STEEL		BRUSHED SATIN FINISH	
DATE		SCALE	
8/13/2004		1/2"	
DRAWN BY		CHECKED BY	
JDFP		JDFP	

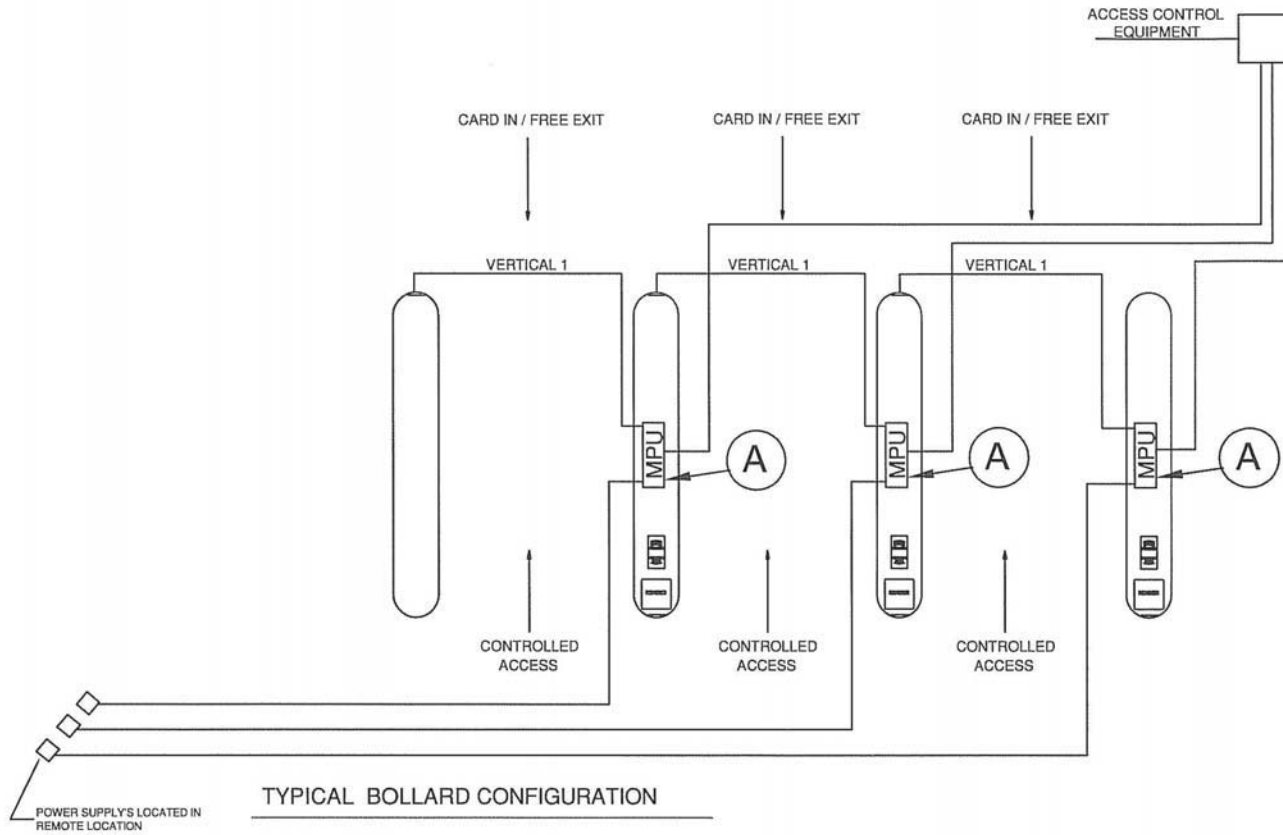
<b>DSI DESIGNED SECURITY, INC.</b>		DATE	3/15/2004	DRAWN BY	DEP
DESIGNED SECURITY, INC. 1402 HAWTHORNE STREET BASTROP, TX 76622 PHONE: 817-800-272-3555		SCALE	1/2" = 1'-0"	CHECKED BY	
PROJECT: OPTICAL TURNSTILE SYSTEM		SHEET #	10/050	DESIGNED BY	
SUBJECT: ES 811 Lam. Lane Config.		DATE	3/15/2004	DRAWN BY	DEP
MATERIAL: PLASTIC LAMINATE		FILE NO.	010-011-ES 811	DESIGNED BY	
FINISH: NONE		SCALE	1/2" = 1'-0"	CHECKED BY	
TITLE: BI-DIRECTIONAL CONFIG.		DATE	3/15/2004	DRAWN BY	DEP

**DESIGNING AN OPTICAL TURNSTILE SYSTEM**

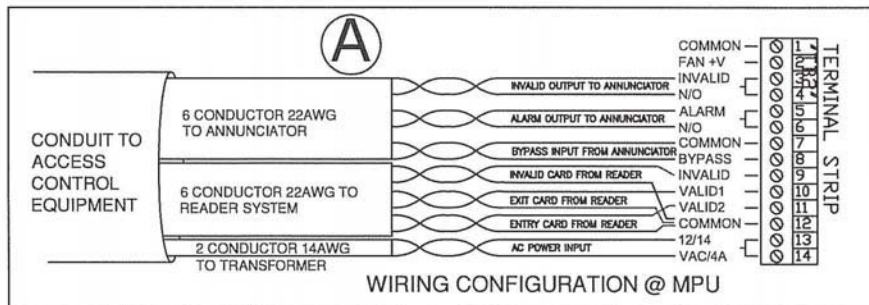
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TYPICAL BOLLARD CONFIGURATION



WIRING CONFIGURATION @ MPU

## TYPICAL WIRING CONFIGURATION FOR ES810 / ES811 / ES820 OPTICAL TURNSTILE