DS!®

DESIGNED SECURITY, INC.

A Detex Company

ES820/ES821

**Example of site-built bollard*

Single Direction - Components Only Model ES820
Bi-Directional - Components Only Model ES821

ES820 OPTICAL TURNSTILE COMPONENT PACKAGE

Designed Security, Inc. Optical Turnstile Component Package is offered for installations where the walkway bollards are to be fabricated in the field.

This approach is useful when the architectural design dictates the need to integrate the optical turnstile directly into existing furniture/fixtures or when local finish materials have been specified for the bollards.

The compact design of the various components facilitates the design and fabrication of the bollards. Designed Security, Inc. engineering staff offers assistance in the placement and use of the components.

Designed Security, Inc.
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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

Graphic Array: 3"W x 6"H x 2.5"D
Control Unit: 4"W x 18"L x 9"H

Wiring Requirements

Input From Card Reader System:
- N/O contact for "valid card"
- N/O contact for "invalid card"
- N/O contact for "bypass"

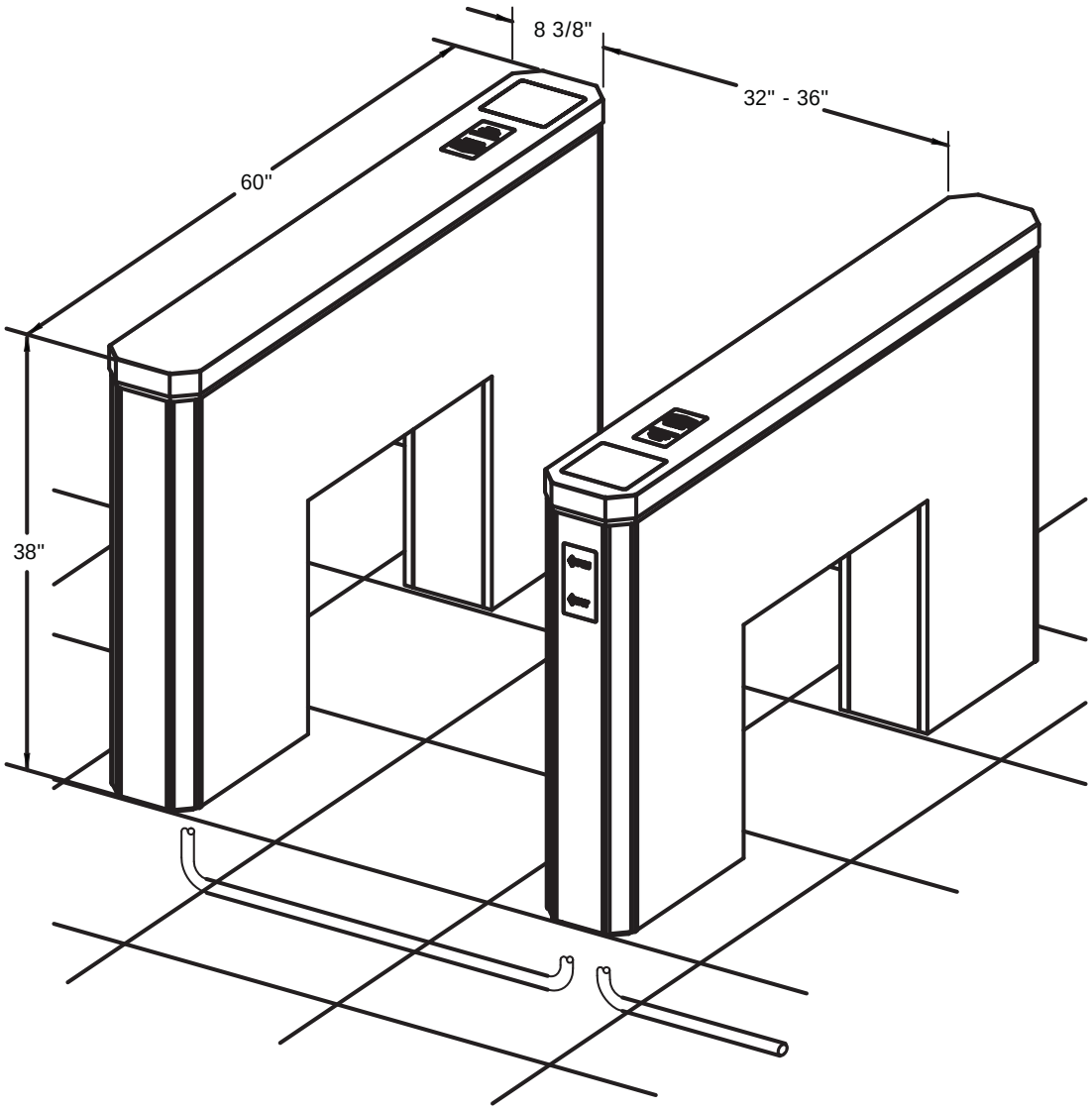
Output From Optical Turnstile:
- N/O contact for "alarm"
- N/O contact for "invalid card"

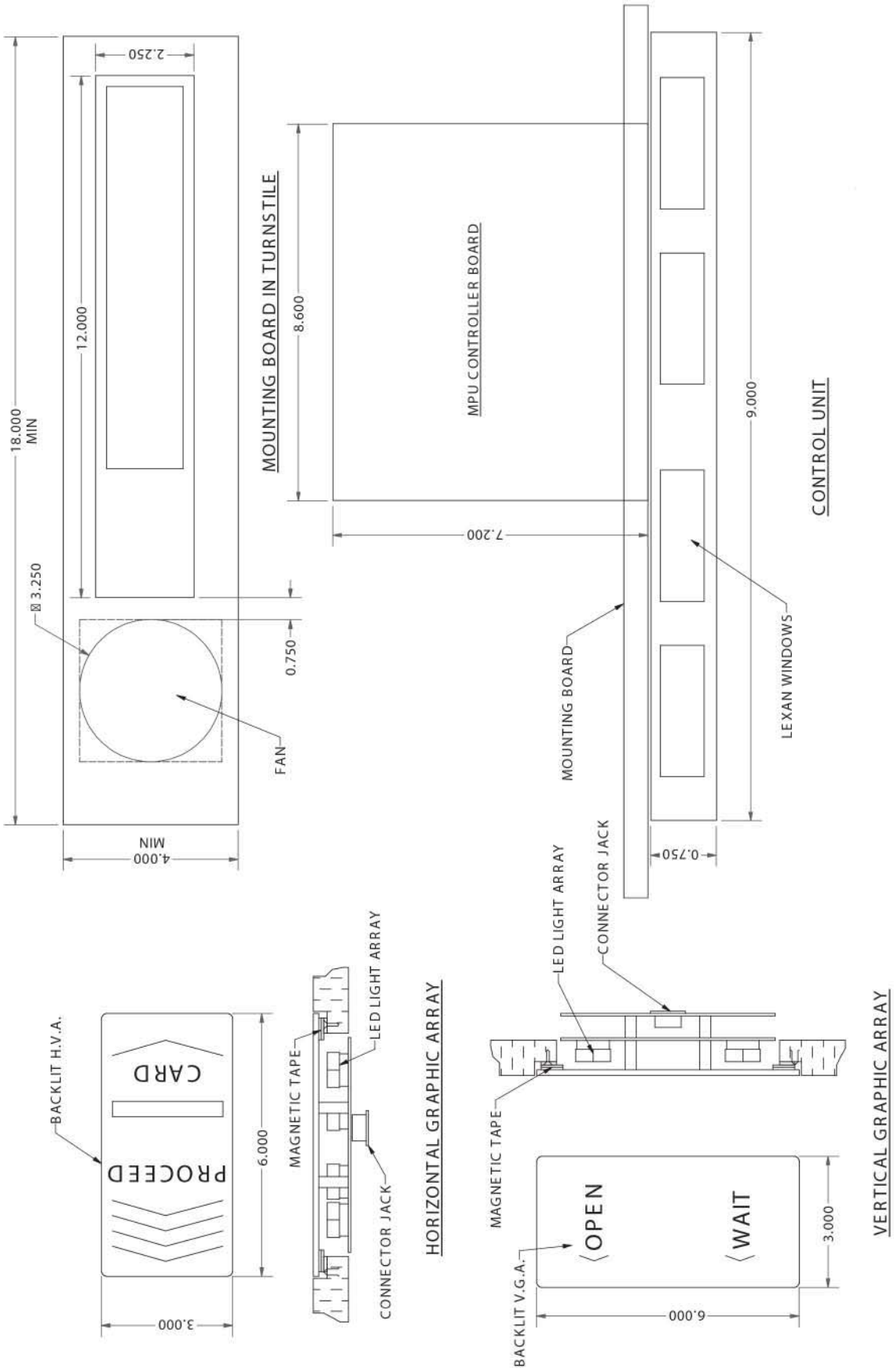
Power: 12 VAC @ 6 amps; transformer included
- use #14 wiring for run of 50' or less and #12 wiring for 50' to 100'

Bollard to Bollard: (required only for bi-directional walkways)
- Vertical graphic array control (4-#26 cond - provided by DSI)
- Horizontal graphic array control (8-#26 cond - provided by DSI)

Optical Turnstile Design Criteria

1. Determine the number of walkways required based on the desired pedestrian throughput and space available.
2. Typical pedestrian throughput is 60 people per minute per lane.
3. Bollards should be spaced 30” to 36” apart. Wider spacing results in pedestrians attempting to pass through the walkway two abreast, resulting in a high incidence of alarms. The 36” spacing meets most local codes for handicap access.
4. Bollards are secured to finished floor using anchor bolts at both end pedestals. Wiring is routed via conduit to either end pedestal.




2.250
18.000
MIN
12.000
Ø 3.250
FAN
0.750
4.000
MIN
MOUNTING BOARD IN TURNSTILE
8.600
MPU CONTROLLER BOARD
7.200
MOUNTING BOARD
9.000
LEXAN WINDOWS
CONTROL UNIT
0.750
LED LIGHT ARRAY
CONNECTOR JACK
MAGNETIC TAPE
BACKLIT V.G.A.
OPEN
WAIT
3.000
6.000
VERTICAL GRAPHIC ARRAY
BACKLIT H.V.A.
CARD
PROCEED
6.000
3.000
MAGNETIC TAPE
LED LIGHT ARRAY
CONNECTOR JACK
HORIZONTAL GRAPHIC ARRAY