

# Graphic Annunciator

## EV Series Graphic Annunciators

## FSCS Series Smoke Control Stations

### Overview

ENVOY graphic annunciators and smoke control panels are designed to present complex status and control information in an easy-to-understand package. The design of ENVOY products permits users to rapidly determine system status and easily operate associated system controls. The addition of system LCD annunciators and remote microphones can turn ENVOY into a complete fire command station.

ENVOY EV series graphic annunciators display system information using high intensity LEDs mounted behind the smoked Plexiglas® panel that displays the artwork. The ENVOY FSCS smoke control series replaces the Plexiglas® graphic panel with a gloss black finished steel panel. High contrast white graphics are placed on the panel along with the required switches and LED indicators, integrating the element of control directly "into the picture." Switches and LEDs can be mounted virtually anywhere on the graphic display itself. White artwork and text on a dark background is standard. Colored artwork is available as an option, to enhance building areas or individual zones. A variety of LEDs and switches are available to meet any display and control requirement.

Power ON, Trouble, and Signal Silenced LEDs; System Reset, Silence, Trouble Silence, and Drill push button switches are available as panel feature options. Other panel options include system LCD displays and remote microphones.

"ENVOY graphic panels are available in a variety of standard sizes. Wall boxes are manufactured from 16-gauge cold rolled steel and finished with a textured black baked enamel. Panels can be surface mount or semi-flush mount. When semi-flush mounting, optional trim kits provide a finished look to the installation.

### Standard Features

- High contrast lines and text
- LCD display capability  
Allows display of custom text messages in graphic annunciator enclosure.
- Smoke control option
- Agency listed with Edwards control panels
- Surface or semi-flush mounting  
Semi-Flush mount with optional trim.
- Field installed modification of EV series graphics with optional graphic transfer kit.
- Left or right hand hinging of outer door

### Application

ENVOY graphics are designed for indoor mounting in areas where easy-to-understand annunciation and/or control is required such as lobbies, control rooms, and building management areas. The flexibility of the ENVOY design and wide variety of options makes ENVOY suitable for everything from a simple graphic annunciator to complex graphic smoke control and fire command stations, complete with audio paging capability.

Installation and Mounting

TYP. KNOCKOUTS TOP & BOTTOM

All Knockouts are  
Combination 1/2" x 3/4"

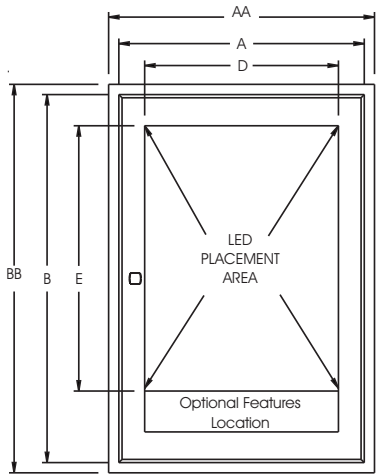
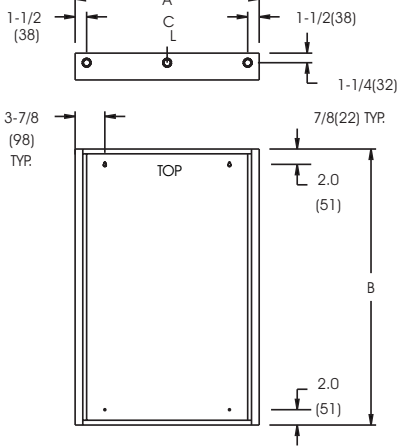
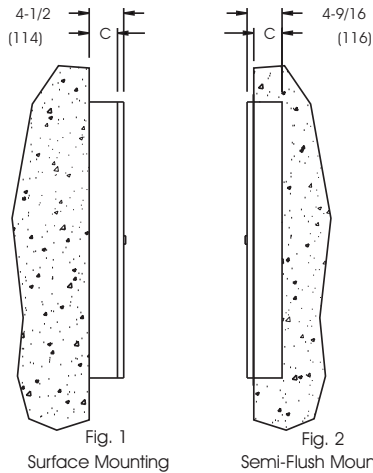
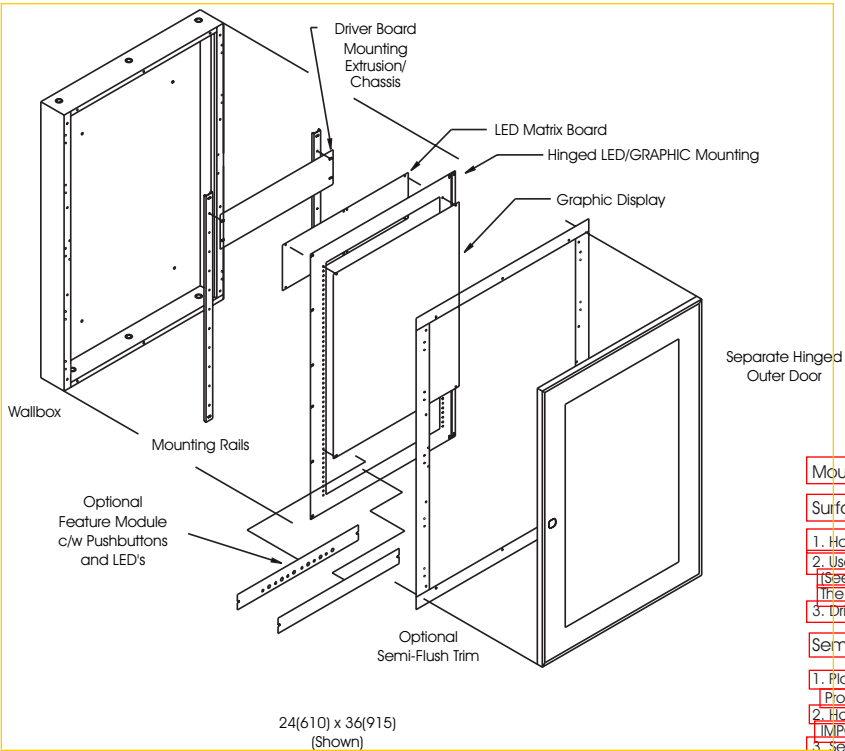


Fig. 3  
Mounting Hole and Knockout Locations

For Use With ...	WALLBOX	FINISH	A in(mm)	B in(mm)	C in(mm)	TRIM	AA in(mm)	BB in(mm)	MAXIMUM RECOMMENDED # OF LED'S	D in(mm)	E in(mm)
EV1 and FSCS-1	EV1B	TEXT, BLACK	24 (610)	18 (458)	3.5 (89)	EV1T	26 (660)	20 (508)	40	17.5(445)	10.5 (267)
EV2 and FSCS-2	EV2B	TEXT, BLACK	24 (610)	24 (610)	3.5 (89)	EV2T	26 (660)	26 (660)	72	17.5(445)	15.75 (400)
EV3 and FSCS-3	EV3B	TEXT, BLACK	24 (610)	36 (915)	3.5 (89)	EV3T	26 (660)	38 (965)	100	17.5(445)	26.25 (667)
EV4 and FSCS-4	EV4B	TEXT, BLACK	36 (914)	48 (1219)	3.5 (89)	EV4T	38 (965)	50 (1270)	120	30 (762)	40 (1016)

These drawings are for information  
purposes only and are subject to change  
without notice. Consult the relevant instal-  
lation sheet for details.



Mounting Instructions:

Surface Mounting - Ref. Fig. 1

1. Hold wallbox in level and upright position against the wall.
2. Use the mounting holes located in the rear panel to mark the hole positions. (See Fig. 3)
3. The top of the wallbox should be no greater than 80" [2032] from the finished floor.
3. Drill the mounting holes. Secure the wallbox using suitable fasteners (By Others).

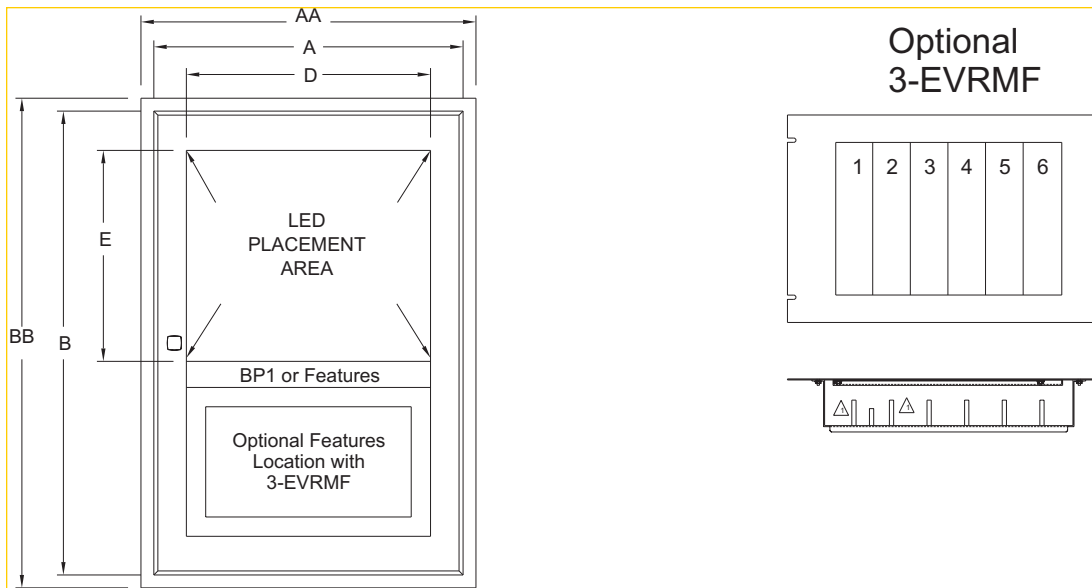
Semi-Flush Mounting - Ref. Fig. 2

1. Plan wall cutout according to wallbox size. (MIN. DEPTH 3 1/2" (89))
- Provide mounting supports for each side of wallbox.
2. Hold the wallbox in a level position.
- IMPORTANT: Be sure the front of the wallbox is flush to the finished wall surface.
3. Secure the wallbox in position using suitable fasteners (By Others).
4. Install Optional Trim to the wallbox using mounting hardware provided.

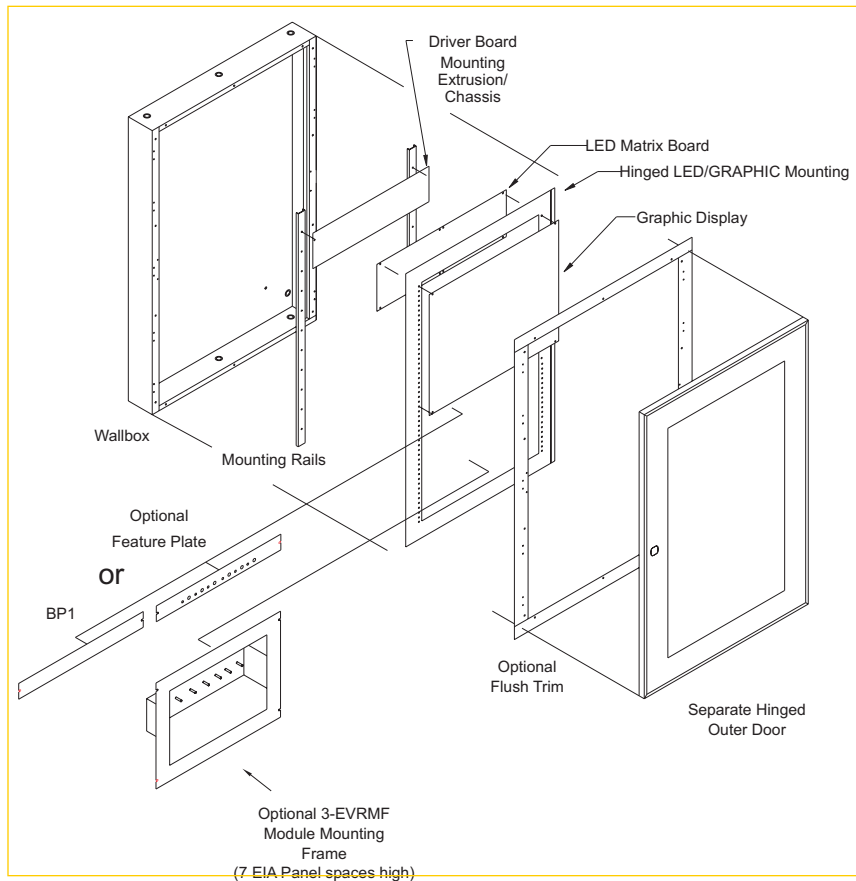
General Notes:

1. Install in accordance with National and Local Installation Standards.

All wall boxes and trim kits are fabricated of 16 gauge cold rolled steel  
finished in textured black baked enamel.



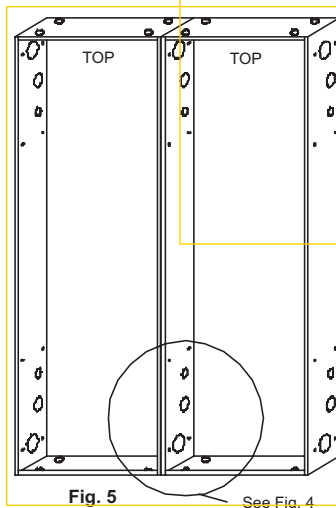
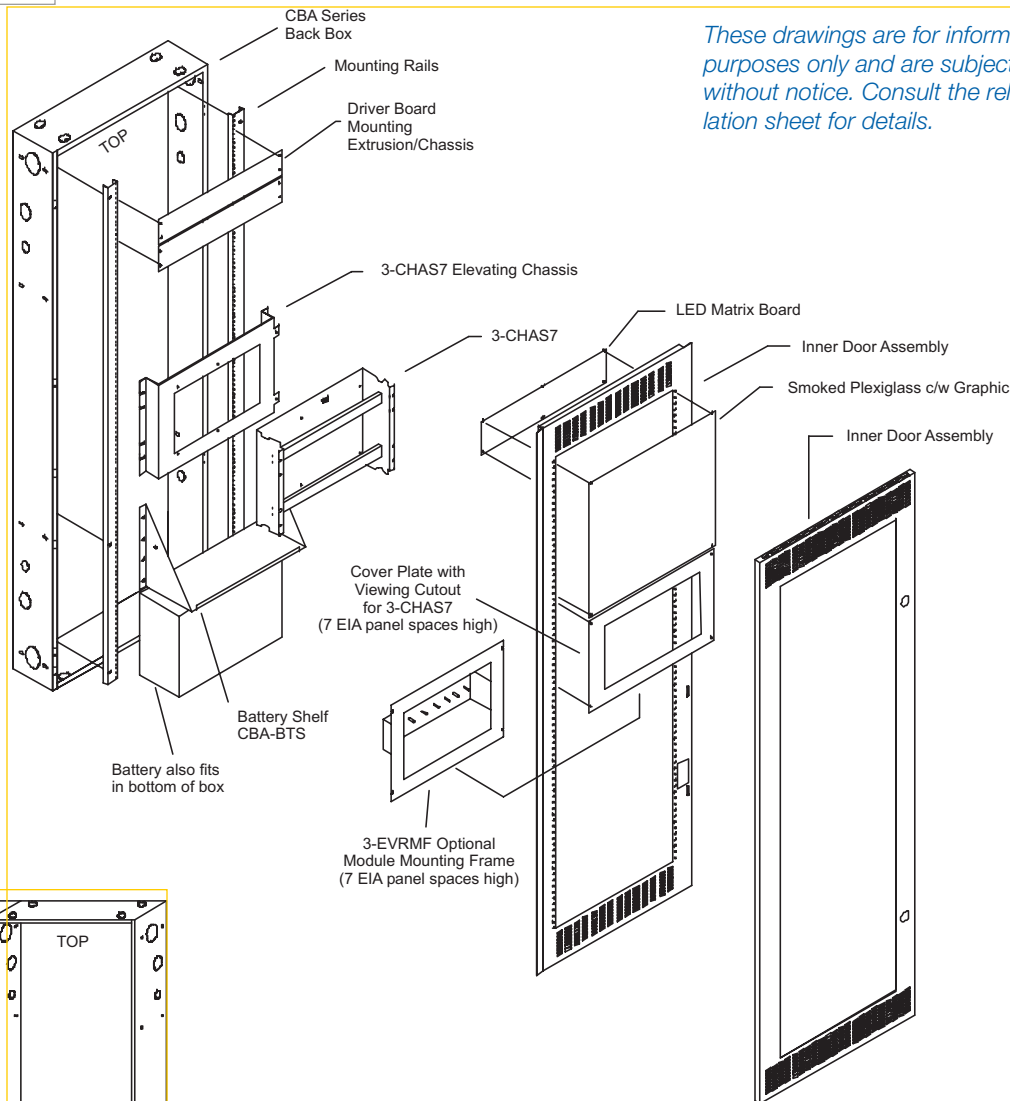
Wallbox	Finish	A IN(mm)	B IN(mm)	C IN(mm)	TRIM	AA IN(mm)	BB IN(mm)	Typical recommended # of LEDs	Typical recommended # of switches (FSCS Series Only)	D IN(mm)	E IN(mm)
EV3B	TEXT. BLACK	24(610)	36(915)	3.5(89)	EV3T	26(660)	38(965)	100	132	17.5(445)	15.75(400)



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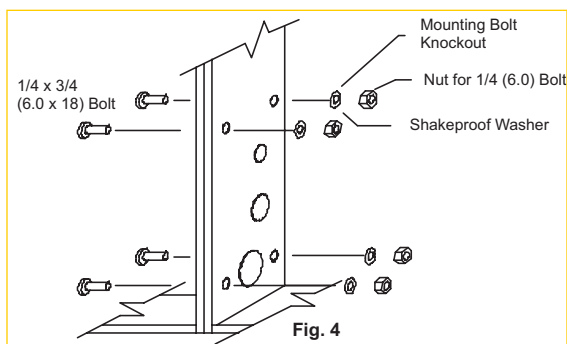
## Notes:

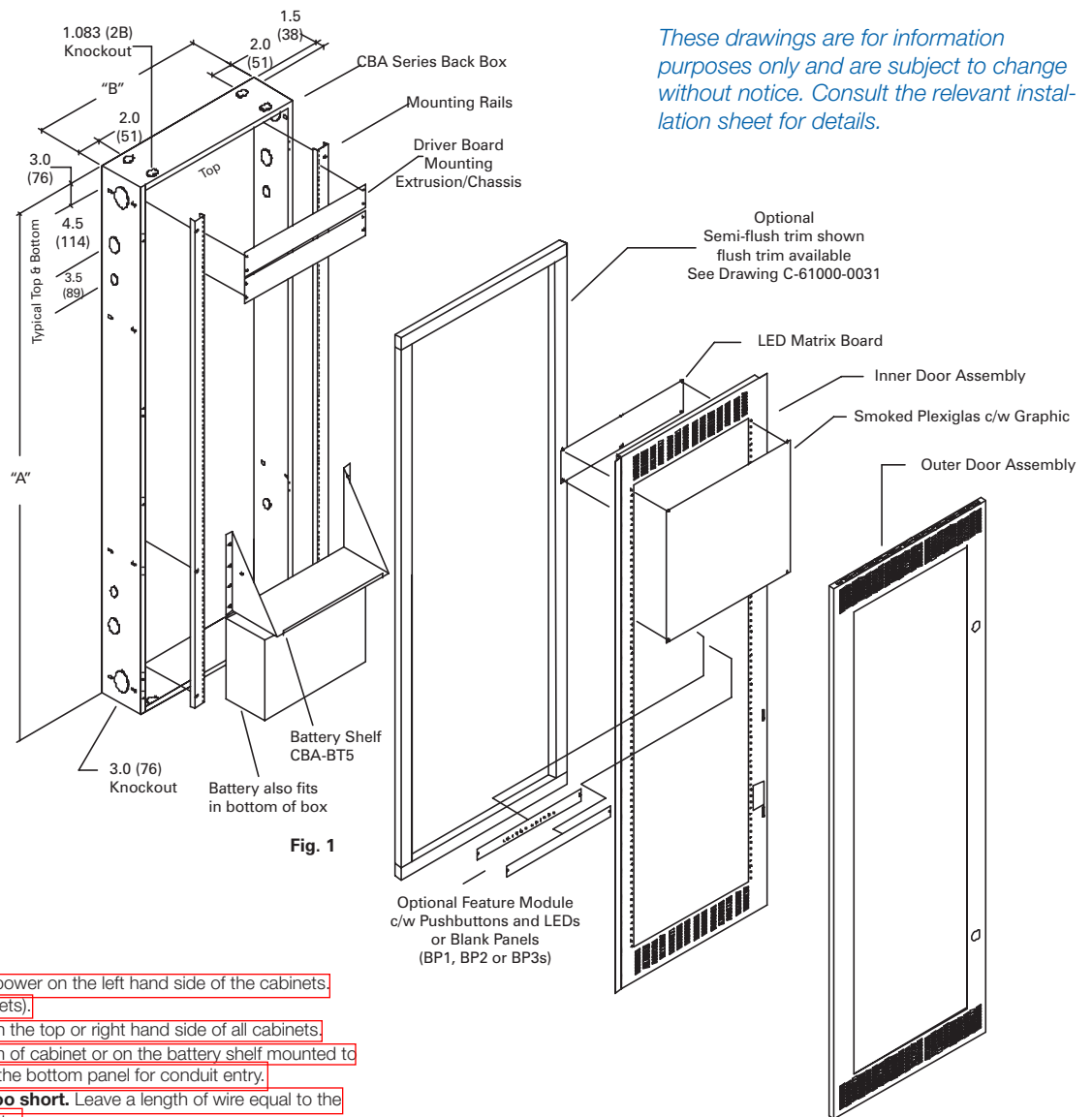
1. Remove these two spacers when a 3-LCD + 3-ANNCPU3 mounts in slots 1 & 2 ONLY.
2. Mounting Space in 3-EVRMF for
  - (1) 3-ANNCPU3 with a 3-LCD and up to 4 Control/Display Modules or up to 6 Control/Display Modules.
3. No Driver Modules can mount on the rails behind the Module Mounting Frame.



## Multiple Cabinet Installation - Surface or Semi-flush - Ref. Fig. 4 and 5

1. IMPORTANT - Remove ALL conduit AND mounting bolt knockouts from adjacent cabinet side panels before ganging the cabinets together. (See Fig. 4)
2. Use appropriate quantity of 1/4 x 3/4 (6.0 x 18) bolts, shakeproof washers and nuts to gang the cabinets together. Bag Assembly supplied with each box. See detail Fig. 4.
3. Plan rough-in wiring and conduit layout before removing outside panel knockouts





#### General Rough-in Notes

1. Locate 120V, 60Hz primary input power on the left hand side of the cabinets.  
(Left hand cabinet if multiple cabinets).
2. Locate input/output zone wiring on the top or right hand side of all cabinets.
3. System batteries mount on bottom of cabinet or on the battery shelf mounted to rear rails. (See Fig. 1.) Do not use the bottom panel for conduit entry.
4. **Do not cut roughed-in wiring too short.** Leave a length of wire equal to the height plus the width of the cabinets.
5. Maintain a minimum of 1.5 (38) clearance from corner walls to side of wallbox.

#### Cabinet Mounting Instructions

##### Flush and Semi-flush Mounting - Refer Fig. 2 and 2A

1. The wall cutout for flush and semi-flush cabinet installation should be 1.0 (25) greater than overall cabinet dimensions (**min. depth 8.0 (203)**). Provide supports for each side of cabinet.
2. The front of the semi-flush mounted cabinets should be a minimum of 5/8 (16) from the finished wall surface.
3. The front of the flush mounted cabinets should be flush to the finished wall surface.
4. Hold the cabinet in a level position.
5. Secure the cabinet in position using suitable 1/4 (6.0) fasteners.

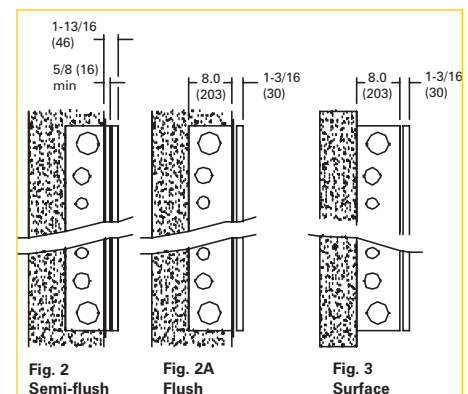
##### Surface Mounting - Refer Fig. 3

1. Hold cabinet in level and upright position against the wall.
2. Use the mounting holes located in the rear panel to mark the hole positions. The top of the cabinet should be no greater than 80 (2032) from the finished floor.
3. Drill the mounting holes. Secure the cabinet using suitable 1/4 (6.0) fasteners.

##### Doors and Trims - Refer Fig. 1

1. Install doors and trims using mounting hardware provided.
2. Outer doors mount with either a Left or Right hand opening. Left hand hinged door shown.

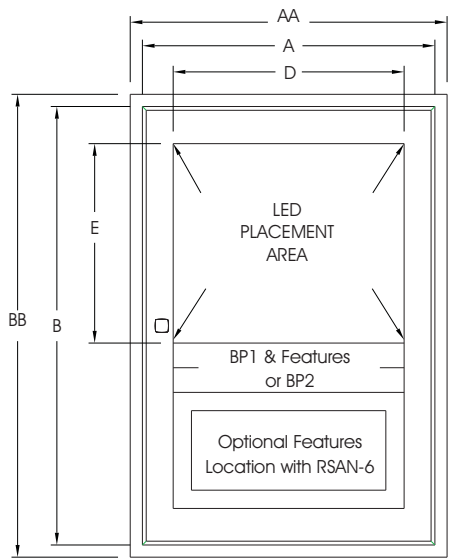
Cat. #	Height Dim. "A"	Width Dim. "B"
CBA48-B	48 (1219)	28 (711)
CBA72-B	72 (1828)	28 (711)



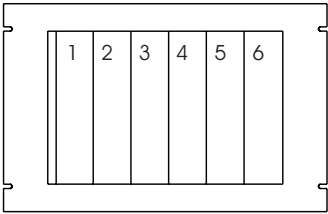
Optional Rack Mount Frames

RSAN-6

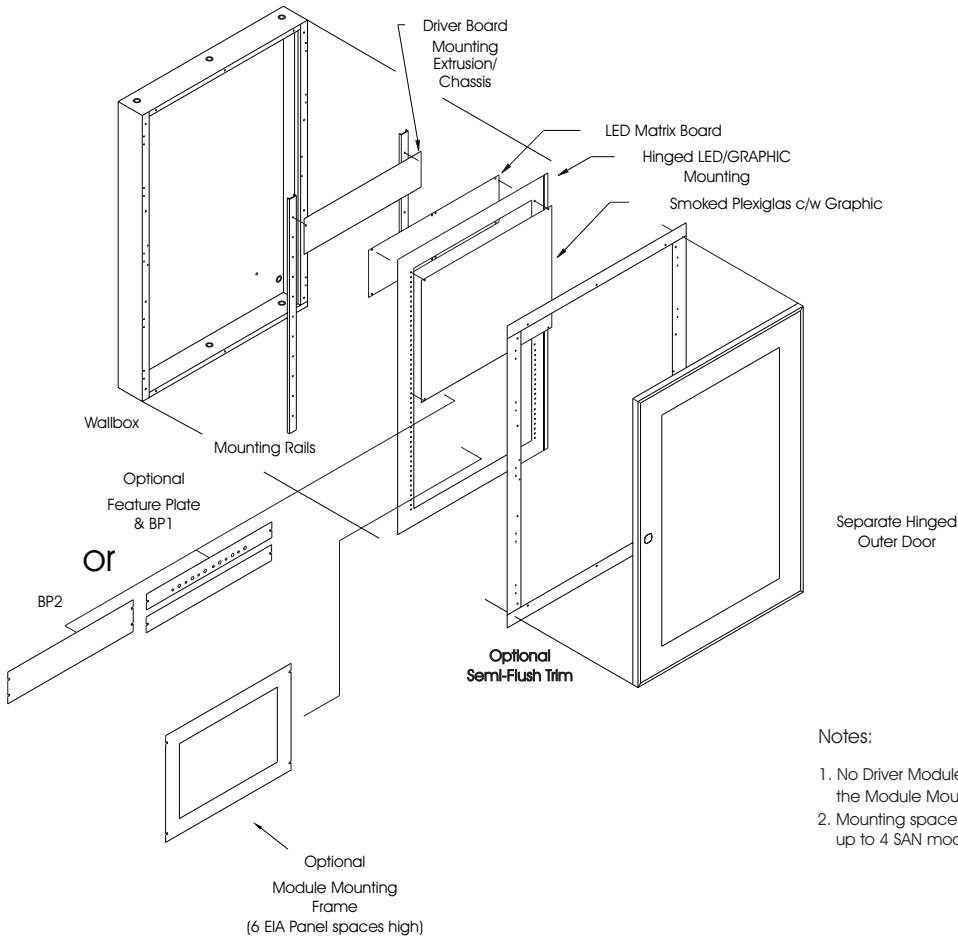
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Optional Module Mounting Frame RSAN-6



Wallbox	Finish	A IN(mm)	B IN(mm)	C IN(mm)	Trim	AA IN(mm)	BB IN(mm)	Typical Recommended # of LEDs	D IN(mm)	E IN(mm)
EV3B	TEXT. BLACK	24(610)	36(915)	3.5(89)	EV3T	26(660)	38(965)	100	17.5(445)	15.75(400)



Separate Hinged Outer Door

- Notes:
- 1. No Driver Modules can mount on the rails behind the Module Mounting Frame.
  - 2. Mounting space in RSAN-6 for [1] SMDN(-C) with up to 4 SAN modules or up to 6 SAN modules.

## Engineering Specification

Provide a <semi-flush> <surface> mounted graphic <annunciator> <smoke control> panel at the location(s) specified on the plans. The panel shall be provided with a key locked see through door, capable of left-hand or right-hand mounting. The graphic <annunciator> <smoke control> panel shall be UL, and ULC listed, and operate on nominal 24 VDC that shall be battery backed up. Communication between the annunciator and the host control panel shall be digital. No individual point wiring shall be permitted.

Annunciator series graphics shall be white artwork on a smoked Plexiglas® background. The annunciator graphic display shall utilize back-lit using high intensity LEDs, located as shown in the shop drawings. LEDs shall be capable of being independently controlled by the host system. Smoke Control Series graphics shall be white artwork on a gloss black steel background. System control switches and high intensity LEDs shall be mounted directly on the graphic, as shown in the shop drawings. Each switch and LED function shall be independently identified by the host system; and function as described elsewhere in this specification. It shall be possible to update the graphic artwork in the field with the need to replace the entire graphic artwork.

The following System controls and indicators shall be provided on the <annunciator> <smoke control> panel: Power ON, Trouble, and Signal Silenced LEDs; System Reset, Silence, Trouble Silence, and Drill push buttons.

<It shall be possible to annunciate text messages via LCD display mounted in the graphic <annunciator> <smoke control> enclosure.>

The graphic <annunciator> <smoke control> panel shall provide an integral remote microphone for system paging.>

The graphic <annunciator> <smoke control panel> shall be Edwards ENVOY series.

## Driver Electronics Reference

The following cross-reference lists the suggested driver electronics to be used with Envoy series products.

Cat #	Description	System
3-ANNCPU1	Annunciator CPU - Supports up to eighteen 3-EVDVR(A) modules	3
3-EVDVR	Driver, 24 LEDs & 12 switches	3
3-EVDVRA	Driver, 24 LEDs & 12 switches w/cables for third party annunciators	3
3-EVPWR	Power Supply - supports up to eighteen 3-EVDVR(A) drivers	3
3-EVPWRA	19" rack mount w/3-EVPWR & room for one 3-ANNCPU1 for third party annunciators	3
3-EVDVRX	19" rack mount for up to three 3-EVDVRAs for third party annunciators	3
SAN-CPU	Annunciator CPU & Power Supply	2,4
SAN-COMM/D	Common Control Module	4
SDR-32	Driver, 32 LEDs	2,4
SIN-16	Input Interface - 16 Switches	2
RSA4-CPU	Annunciator CPU	4
RSA4-COM/D	Common Control Strip	2,4
SRAX	Annunciator CPU. Supports up to 6 XGD cards	5
XGD	Driver, 24 LED's and 12 Switches	5
EV24VDC	Individual LEDs wired with LED positive leads connected together	1

1 = Direct wired 24 VDC LEDs, 2 = EST2/IRC-3/FCC, 3 = EST3, 4 = LSS4, 5 = QuickStart

## Ordering / Specification Information

### Graphic Annunciator/Smoke Control Panels

Catalog Number	Artwork/ LED/ Switch Placement area	Typical # of In-graphic LEDs (See Note 1)	Max # of In-graphic Switches (See Note 1)	ULI/ULC Listing	Driver Electronics	Feature Options (see option chart below)
EV1	17.5"W x 10.5"H (445 mm x 267 mm)	40 option #1,2	N/A	Accessory	6 SAN / RSA4 Modules or a 3-ANNCPU1, one 3-EVPWR & four 3-EVDVRs	<b>System LEDs:</b> 15,16,17 (6 max.)
EV2	17.5"W x 15.75"H (445 mm x 400 mm)	72 option #1,2			12 SAN / RSA4 Modules or a 3-ANNCPU1, one 3-EVPWR & six 3-EVDVRs	
EV3	17.5"W x 26.25"H (445 mm x 667 mm)	100 option #1,2			18 SAN / RSA4 Modules or a 3-ANNCPU1, one 3-EVPWR & eleven 3-EVDVRs	
EV4	30"W x 40"H (762 mm x 1016 mm)	120 option #1,2			18 SAN / RSA4 Modules or a 3-ANNCPU1, one 3-EVPWR & eleven 3-EVDVRs	
EVCBA48	17.5"W x 38"H (445mm x 965 mm)	120 & up option #1,2			One & up 3-ANNCPU1s, one & up 3-EVPWR & eleven & up 3-EVDVRs	
EVCBA72	17.5"W x 63"H (445mm x 1600mm) (See Note 2)	120 & up option #1,2	48 options # 5 thru 13	Smoke Control (EST3 Only)	One & up 3-ANNCPU1s, one & up 3-EVPWR & eleven & up 3-EVDVRs	<b>System Switches:</b> 14,18,19, 20,22,23 (6 max.)
FSCS-1	17.5"W x 10.5"H (445 mm x 267 mm)	40 option #3,4			One 3-ANNCPU1, one 3-EVPWR & four 3-EVDVRs	
FSCS-2	17.5"W x 15.75"H (445 mm x 400 mm)	72 option #3,4			One 3-ANNCPU1, one 3-EVPWR & six 3-EVDVRs	
FSCS-3	17.5"W x 26.25"H (445 mm x 667 mm)	100 option #3,4			One 3-ANNCPU1, one 3-EVPWR & eleven 3-EVDVRs	
FSCS-4	30"W x 40"H (762 mm x 1016 mm)	120 option #3,4			One 3-ANNCPU1, one 3-EVPWR & eleven 3-EVDVRs	
FSCBA48	17.5"W x 38"H (445mm x 965 mm)	120 & up option #1,2,3,4			One & up 3-ANNCPU1s, one & up 3-EVPWR & eleven & up 3-EVDVRs	
FSCBA72	17.5"W x 63"H (445mm x 1600mm) (See Note 2)	120 & up option #1,2,3,4			One & up 3-ANNCPU1s, one & up 3-EVPWR & eleven & up 3-EVDVRs	

#### Notes:

- The density of individual graphic LED and switch layouts may change the quantities shown. LED spacing should be 1/2" apart on center and not less than 3/16". All switches, text and symbols should be kept 1/2" away from viewing area border. In-graphic toggle switches (options 3, 4, & 5) require 1 1/4" centers.
- The EVCBA72/FSCBA72B provide mounting space equivalent to two EV3 or two FSCS-3 units mounted in a single cabinet.



## Options

Feature / Option #	Catalog #	Description
1	EVZLED	Back Lit Graphic LED - Red, Yellow, or Green for EV series graphics
2	EVBLEED	Back Lit Graphic LED - Blue for EV series graphics
2	EVZWLED	Back Lit graphic LED - White for EV series graphics
3	EVZSLED	In-graphic LED - Red, Yellow or Green for FSCS series graphics
4	EVZSBLED	In-graphic LED - Blue for FSCS series graphics
4	EVZSWLED	In-graphic LED - White for FSCS series graphics
5	EVSC3-21	In-graphic 2-Pos Toggle Switch for FSCS series graphics - ON wired to driver input (1 point)
6	EVSC3-22	In-graphic 2-Pos Toggle Switch for FSCS series graphics - ON & OFF wired to driver inputs (2 points)
4	EVSC3-32	In-graphic 3-Pos Toggle Switch for FSCS series graphics - ON & OFF wired to driver inputs (2 points)
5	EVSC3-33	In-graphic 3-Pos Toggle Switch for FSCS series graphics - ON, AUTO & OFF wired to driver inputs (3 points)
9	EVSC3R-21	In-graphic 2-Pos Rotary Switch for FSCS series graphics - ON wired to driver input (1 point)
10	EVSC3R-22	In-graphic 2-Pos Rotary Switch for FSCS series graphics - ON & OFF wired to driver inputs (2 points)
11	EVSC3R-32	In-graphic 3-Pos Rotary Switch for FSCS series graphics - ON & OFF wired to driver inputs (2 points)
12	EVSC3R-33	In-graphic 3-Pos Rotary Switch for FSCS series graphics - ON, AUTO & OFF wired to driver inputs (3 points)
13	EVSC3R-44	In-graphic 4-Pos Rotary Switch for FSCS series graphics - all positions wired to driver inputs (4 points)
14	EVKE	Enable Key switch
15	EVPLED	Annunciator Power On LED - EV & FSCS series
16	EVTLED	Trouble LED - EV & FSCS series
17	EVSSLED	Signals Silenced LED - EV & FSCS series
18	EVRP	Reset Push Button - EV & FSCS series
19	EVSSP	Signal Silence Push Button - EV & FSCS series
20	EVTS	Trouble Silence Switch - EV & FSCS series
21	EVDRILL	Drill Switch - EV & FSCS series
22	EVLTL	Lamp Test Push Button - EV & FSCS series
23	EVSP	Spare Push Button - EV & FSCS series
24	EVLTPS	Lamp Test Power Supply - EV & FSCS series - Required if lamp test option used on type 1 (24VDC) system.

## Wallboxes, Doors & Trim Kits

Catalog #	Description
EV1B	EV1 & FSCS-1 Wallbox - 24"W x 18"H x 3 1/2"D - (609mm x 457mm x 89mm) - black
EV2B	EV2 & FSCS-2 Wallbox - 24"W x 24"H x 3 1/2"D - (609mm x 609mm x 89mm) - black
EV3B	EV3 & FSCS-3 Wallbox - 24"W x 36"H x 3 1/2"D - (609mm x 914mm x 89mm) - black
EV4B	EV4 & FSCS-4 Wallbox - 36"W x 48"H x 3 1/2"D - (914mm x 1219mm x 89mm) - black
EV1T	Trim for EV1B Wallbox - Overall Dimensions 26"W x 20"H - (660mm x 508mm) - black
EV2T	Trim for EV2B Wallbox - Overall Dimensions 26"W x 26"H - (660mm x 660mm) - black
EV3T	Trim for EV3B Wallbox - Overall Dimensions 26"W x 38"H - (660mm x 965mm) - black
EV4T	Trim for EV4B Wallbox - Overall Dimensions 38"W x 50"H - (965mm x 1270mm) - black
CBA48-B	28"W x 48"H x 8"D (711mm x 1219mm x 203mm) Wallbox white
CBA48-D	Door, Viewing area 17 3/8" W 38" H (441mm x 965mm)
CBA72-B	28"W x 72"H x 8"D Wallbox white (711mm x 1829mm x 203mm)
CBA72-D	Door, Viewing area 17 3/8" W 63" H (441mm x 1600mm)
CBA48-VT	Semi-Flush Vertical Trim White for a CBA48-B wallbox - Overall 48 1/8"H (1221mm)
CBA72-VT	Semi-Flush Vertical Trim White for a CBA72-B wallbox - Overall 72 1/8"H (1831mm)
CBA-HT1	Semi-Flush Horizontal Trim for 1 CBA48-B or CBA72-B wallbox - Overall 30 5/8"W (778mm)
CBA-HT2	Semi-Flush Horizontal Trim for 2 CBA48-B or CBA72-B wallboxes - Overall 58 5/8"W (1489mm)
CBA-HT3	Semi-Flush Horizontal Trim for 3 CBA48-B or CBA72-B wallboxes - Overall 86 5/8"W (2200mm)
CBA48-FVT	Flush Vertical Trim White for a CBA48-B wallbox - Overall 46 3/4"H (1188mm)
CBA72-FVT	Flush Vertical Trim White for a CBA72-B wallbox - Overall 70 3/4"H (1798mm)
CBA-FHT1	Flush Horizontal Trim for 1 CBA48-B or CBA72-B wallbox - Overall 30"W (762mm)
CBA-FHT2	Flush Horizontal Trim for 2 CBA48-B or CBA72-B wallboxes - Overall 58"W (1473mm)
CBA-FHT3	Flush Horizontal Trim for 3 CBA48-B or CBA72-B wallboxes - Overall 86"W (2184mm)