Features

Remote Annunciator Panels provide fire alarm control panel status information at locations distant from the fire alarm control panel

Typical functions include:

- Remote status LED indicators and dedicated switch input controls located on LED/switch modules
- Remote status LED indicator modules with 8 red or 16 (8 red/8 yellow) LEDs that are pluggable to allow color selection (yellow, green, or red LEDs are ordered separately)
- Remote microphone and operator interface for access to the emergency voice/alarm communications system
- Remote master telephone for communicating to the firefighter telephone system
- Also available with InfoAlarm Command Center expanded content user interface (refer to Two Bay Remote Annunciator LED/Switch Module Reference, InfoAlarm Command Center Detail Reference, and to data sheet *AC4100-0045* for additional information)

Additional optional modules include:

- Remote Command Center module for LCD status readout and keyswitch controlled functions
- 24 Point I/O module
- RS-232 ports for remote printer or terminal connections
- Power supplies with battery charger for annunciator
- Panel mounted printer for system status recording

Wiring requirements:

- RUI or RUI+ (remote unit interface) supervised communications from the host fire alarm control panel provide Style 4 or Style 7 SLC (signaling line circuit) connections
- Microphone and telephone circuits require their own dedicated wiring

Listed to:

- UL Std. 864, Fire Detection and Control (UOJZ), and Smoke Control Service (UUKL)
- UL Std. 2017, Process Management Equipment (QVAX)
- UL Std. 1076, Proprietary Alarm Units-Burglar (APOU)
- UL Std. 1730, Smoke Detector Monitor (UULH)
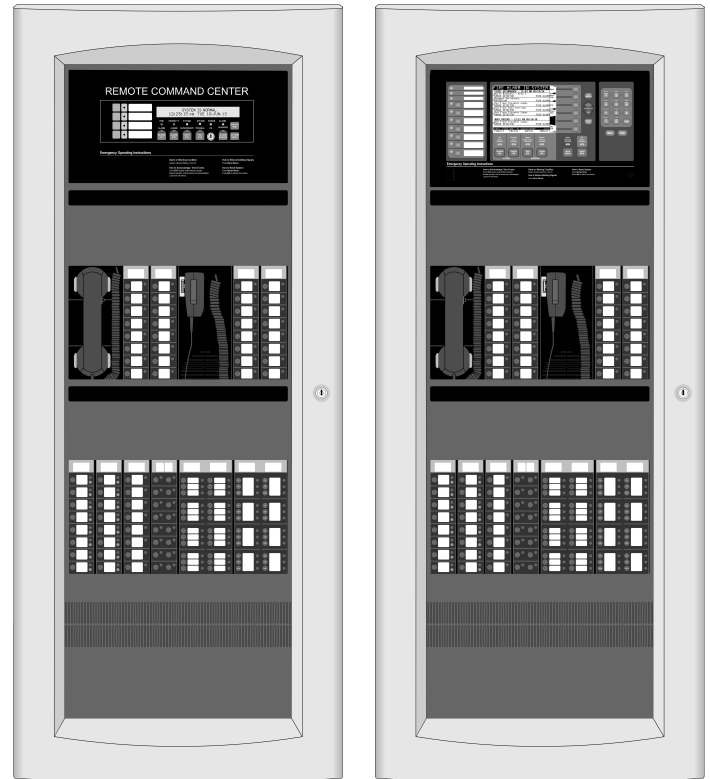- ULC Std. S527-99

Figure 1: 4100ES Remote Annunciator in a Three Bay Cabinet with Audio Operator Modules; Remote Command Center (left) and with an InfoAlarm Command Center (right)

Introduction

Remote Annunciator Panels

are dedicated purpose transponders that support fire alarm system status information. Typical use is when the host fire alarm control panel is located away from the area where those responding to a fire situation need status information.

Status and Control.

Controls are suitable for firefighter or other fire brigade responders to access particular information and for system control. When equipped with a remote microphone and emergency voice/alarm communications system control, an authorized user can take command of the system and either play selected pre-recorded messages or select specific tones, or initiate live broadcast information either globally into the system, or to selected areas.

Remote Master Firefighter Phone.

When equipped with a remote master phone, the authorized user can connect to remote phone call-in requests and allow callers to be connected to each other. Although intended for use in assisting fire responders, these system are also helpful during system setup and test.

* Additional listings may be applicable; contact your local product supplier for the latest status.

AC4100-0038 Rev 13 6/2013

Module Bay Description

Remote Annunciators

include a bay assembly, a power distribution interface module (PDI), a Transponder Interface Module, and an interconnect harness. Communications with the host fire alarm control panel are via a Remote Unit Interface (RUI or RUI+) connection that allows for up to 2500 ft (762 m) distance. RUI can communicate with up to a total of 31 remote devices per master controller (on one or multiple RUI channels) and can be either Style 4 or Style 7 communications. Wiring can be either shielded or unshielded, twisted, or untwisted single pair wiring.

A100-9610 Remote Annunciator.

This model is for applications that may require a full complement of the Remote Annunciator functions (refer to Product Selection). Power is from a cabinet mounted Remote Power Supply (RPS).

A100-9611 Basic Remote Annunciator.

For remote annunciator applications that require less features in the cabinet, select this model which accepts power from a separate fire alarm control cabinet. (This model does NOT accept: a cabinet mounted power supply, expansion phone cards, Class A phone modules, RS-232 modules, panel mounted printers, or 24 I/O modules.)

Optional Expansion Bays

each include a PDI and accept a variety of optional modules for specific annunciator functions.

The Battery Compartment

(bottom) accepts two batteries, up to 50 Ah. Battery mounting does not interfere with available module space. (Not applicable to the model A100-9611)

Packaging Availability

· Modules are power-limited (except as noted, such as relay modules)
· Enclosure are available for one, two, or three bay sizes or for cabinet rack mounting
· Boxes, doors with tempered glass inserts, and dress panels are available in beige or red (ordered separately)
· Refer to document *AC4100-0037* for enclosure details.

Remote Command Center

The optional Remote Command Center occupies the top bay of a Remote Annunciator. It provides an LCD status readout with keyswitch activated control switches and a local tone-alert sounder. Features are essentially identical to the Remote LCD Annunciator model A4603-9101 (reference document *AC4603-0001*).
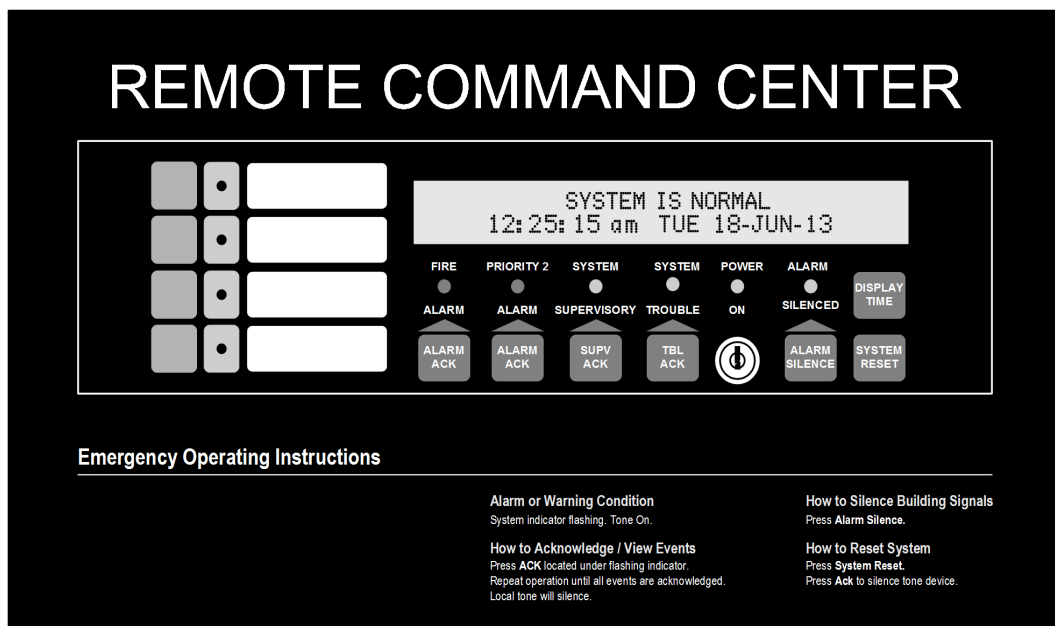

Figure 2: A100-1292 Remote Command Center

Remote Annunciator Audio Module Reference
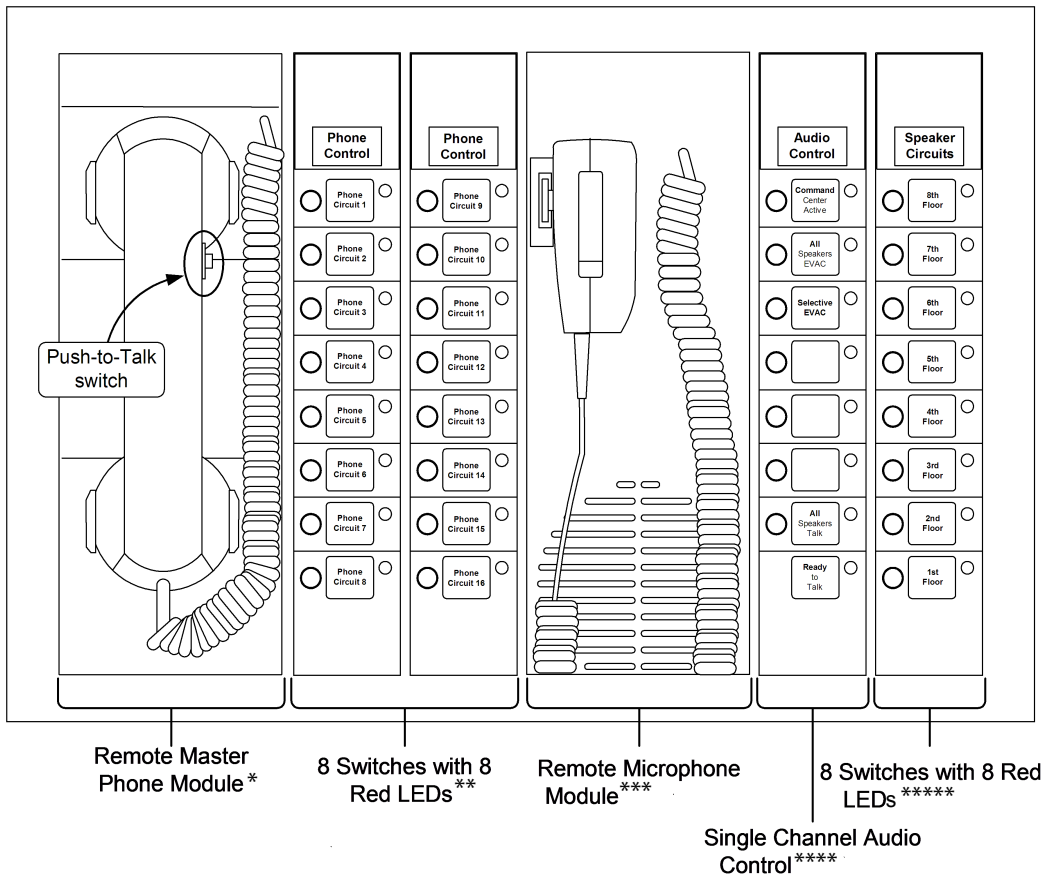
Figure 3: Module Reference

* A100-1271

** A100-1280, 2 shown with typical labels

*** A100-1244

**** A100-1252

***** A100-1280

Two Bay Remote Annunciator LED/Switch Module Reference

Two bay Remote Annunciator Panel (non-Audio)

Remote Printer option (can be located where desired)

Typical non-audio LED/Switch and LED modules, with sample module labeling
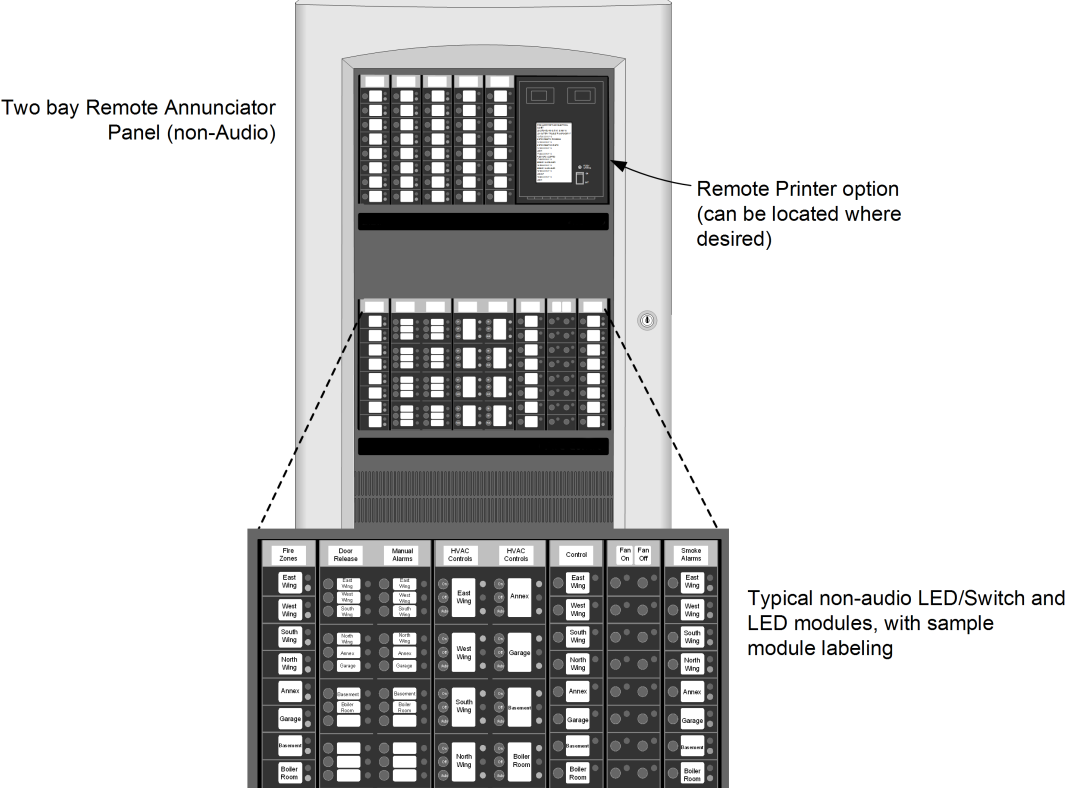
Figure 4: Module Reference

InfoAlarm Command Center Detail Reference
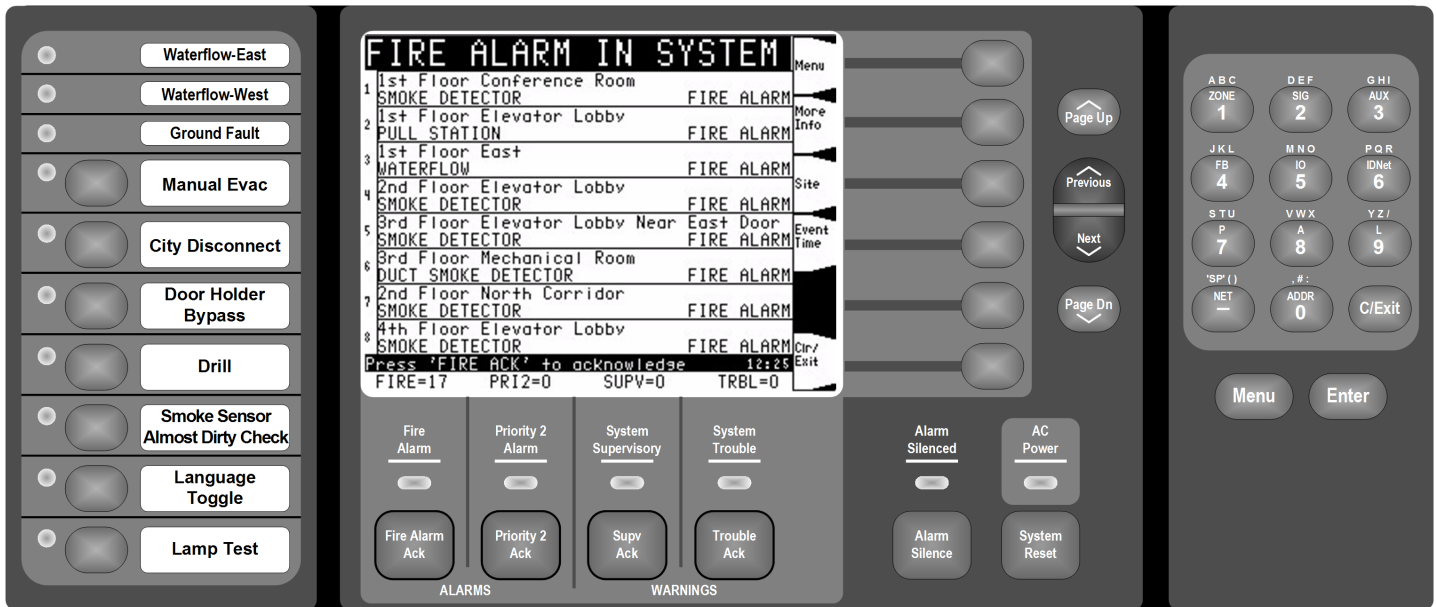
Figure 5: Detail reference

Audio Control Module Detail
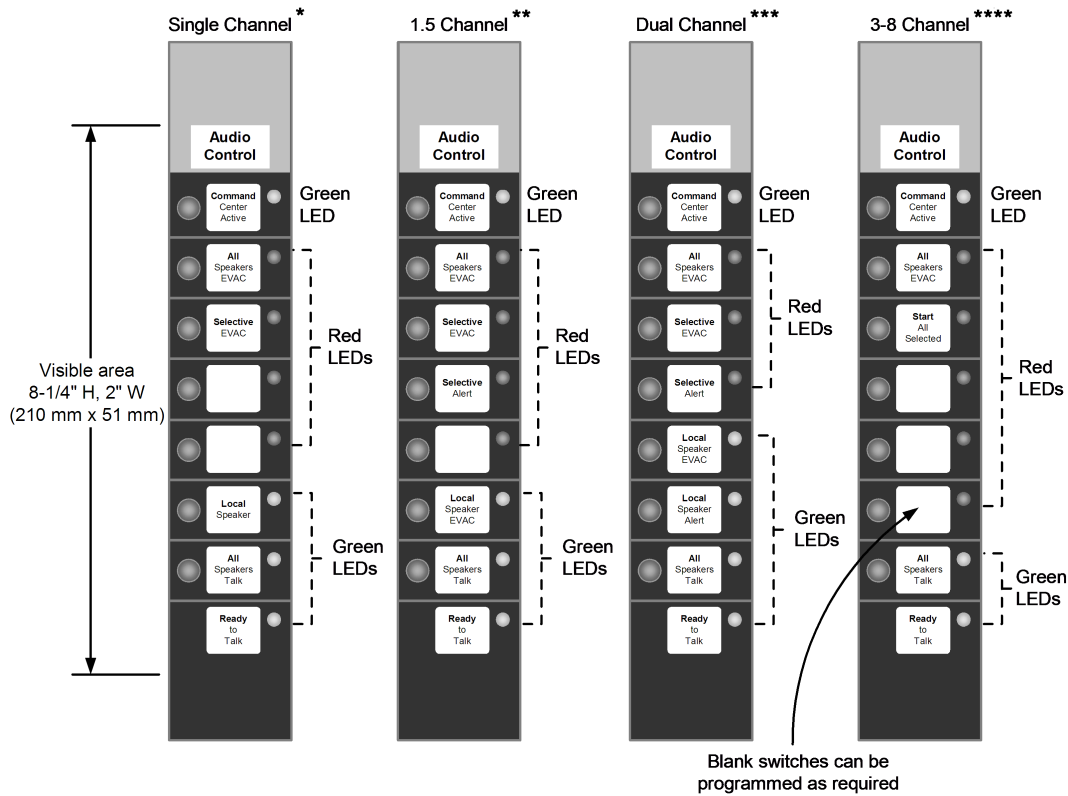
Figure 6: Module Detail

*A100-1252

**A100-1253

***A100-1254

****A100-1255

Expansion Bay Module Loading Reference

Slot 1	Slot 2	Slot 3	Slot 4	Slot 5	Slot 6	Slot 7	Slot 8

Block A   **Block C**   **Block E**   **Block G**

Block B   **Block D**   **Block F**   **Block H**

Expansion Bay Chassis

Size definitions:

Block = 4 " W x 5 " H card area

Slot = 2 " W x 8 " H motherboard with daughter card
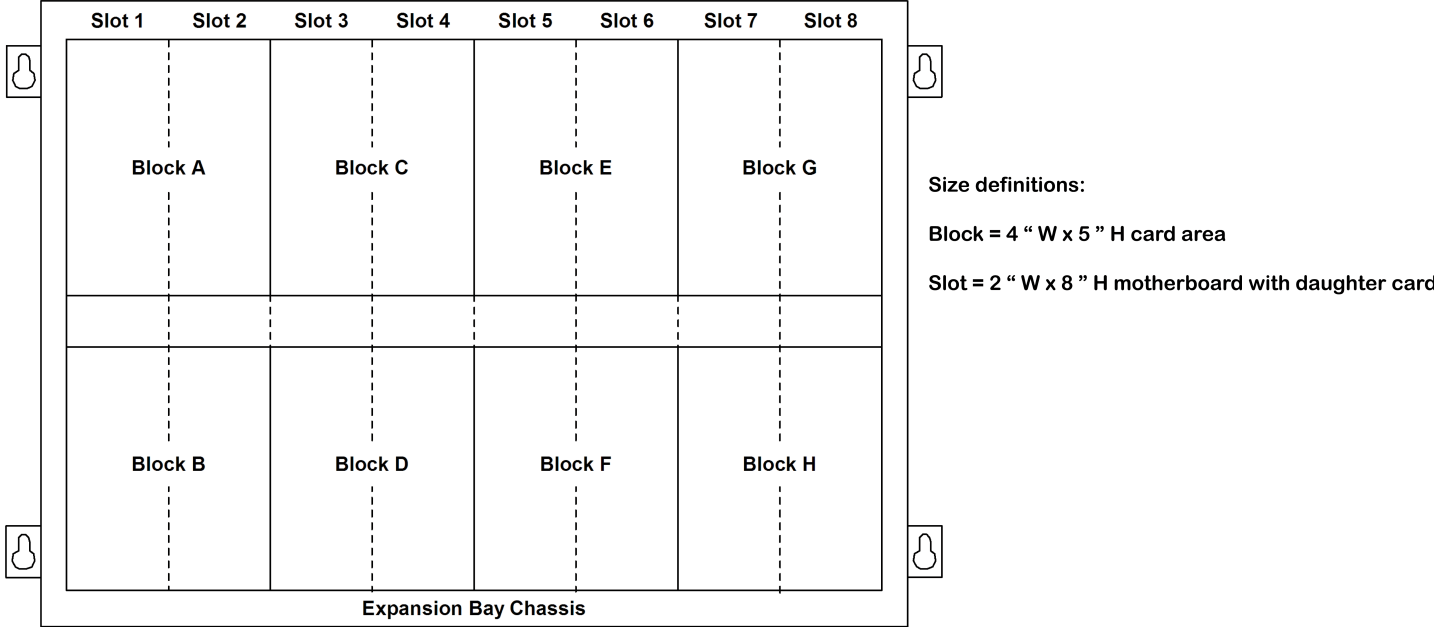
Figure 7: Loading Reference

Wall Mounted Enclosure Installation Reference

Front view, box outline without door

Side view with door attached

3 Bay height =
56" (1422 mm)

Door thickness
4-3/4"(121 mm)

Knockout screw/nail holes
(for semi-flush mounting)

2 Bay height =
40" (1016 mm)

Exposed cabinet for
semi-flush mounting
1-3/8" (35 mm)
minimum

Wall board reference
for semi-flush
mounting, 6" stud

1 Bay height =
22" (559 mm)

Doors can be hinged left or right

Exposed door and cabinet
for semi-flush mounting
6-1/8" (156 mm) minimum

Stud alignment
markers, each side

6" stud

4" stud

Optional semi-flush
trim kit reference

24" (610 mm)

6-29/32"
(175 mm)

11-11/16"
(296 mm)

Figure 8: Installation Reference

Note: A system ground must be provided for Earth Detection and transient protection devices. This connection shall be made to an approved, dedicated Earth connection per NFPA 70, Article 250, and NFPA 780.
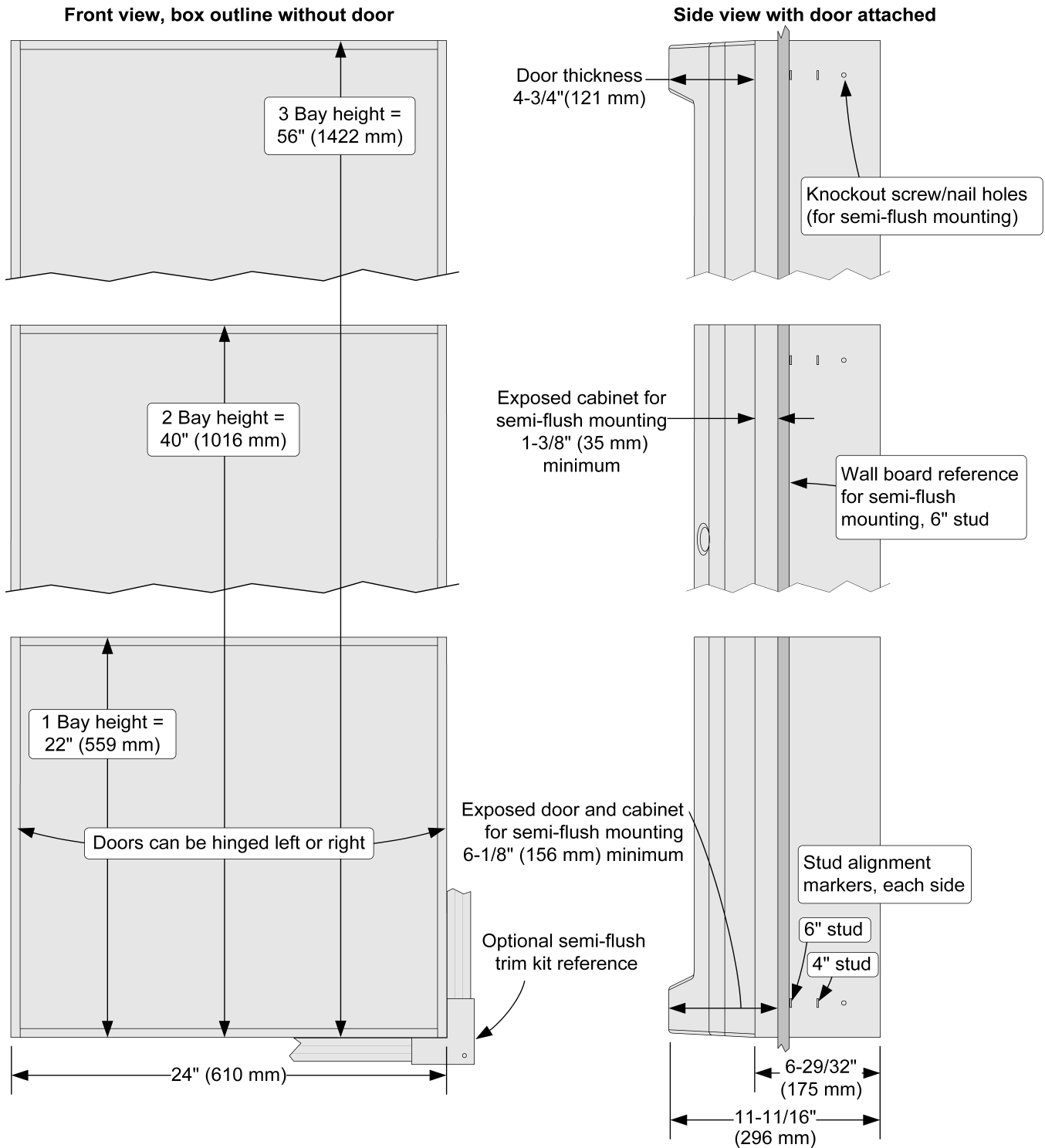
Additional 4100ES Data Sheet Reference

Table 1: Data Sheet Reference

Subject		Data Sheet	Subject	Data Sheet
4100ES Panels	With EPS Power Supplies	AC4100-0100	LED/Switch Modules	AC4100-0032
InfoAlarm Command Center		AC4100-0101	4100ES Basic Panel Modules	AC4100-0031
Network Display Unit (NDU)		AC4100-0102	MINIPLEX Transponders	AC4100-0035
MINIPLEX Transponders		AC4100-0103	Network Display Unit (NDU)	AC4100-0036
Enclosures		AC4100-0037	Remote Battery Charger	AC4081-0002
4100ES/4100U Audio/Phone Modules		AC4100-0034		

Product Selection

Table 2: Panel Type

SKU	Description	Details and Mounting Reference
A100-9610	Remote Annunciator Panel; requires an internal power supply	Includes a bay assembly with power distribution board, a Basic Transponder Interface Module (A100-0620) mounted in Block A, and an interconnect harness for connecting to 4100ES Slot modules
		Supervisory and Alarm current = 87 mA
A100-9611	Basic Remote Annunciator Panel; requires power from another cabinet	Includes a bay assembly with power distribution board, a remotely powered Transponder Interface Module mounted in Block A, and an interconnect harness for connecting to 4100ES/4100U Slot modules
		Supervisory and Alarm current = 87 mA

Table 3: Remote Command Center Option*

SKU	Description	Details and Mounting Reference
A100-1292	Panel Mounted LCD Annunciator; 2 line by 40 character LCD with LED illumination; LED illumination is off during supervisory, turning on with alarm or when switches are activated	Mounting requires the top bay; 4100ES flat modules are allowed behind it; RUI device, RUI/RUI+ connection is required
		Supervisory current = 65 mA (w/o backlight) Alarm current = 140 mA
* for InfoAlarm Command Center expanded content display products, refer to data sheet *AC4100-0045*		

Table 4: Emergency Voice/Alarm Communications Operator Interface Options

SKU	Description		Details and Mounting Reference
A100-1244	Remote Microphone (mike) Module		Front panel module; requires 2 Slots (4" [51 mm]), space behind accepts 4100ES/4100U flat modules only (requires dedicated wiring to fire alarm control panel audio control module); Supv. = 2.4 mA, Active = 6 mA
A100-1252	1 Channel (audio or mike)	Operator Interface Modules	Single slot modules requiring connection to an LED/switch controller; space behind accepts 4100ES flat modules only; adjacent LED/switch module(s) are required for specific speaker circuit selection (refer to document AC4100-0034 for audio reference and document *AC4100-0032* for LED/switch module reference); Supv. = 0, Alarm = 24 mA
A100-1253	1.5 Channel (audio + mike)		
A100-1254	2 Channel (full audio)		
A100-1255	3-8 Channel		

Table 5: Firefighter Telephone System Products*

SKU	Description	Details and Mounting Reference	
A100-1271	Remote Master Telephone	Mounts in two vertical blocks of bay front, locate as required; space behind allows 4100ES flat modules only	
A100-1272	Phone Module with 3 Class B phone NACs	Single Block module, mounts to bay mounting plate	Not available with A100-9611
A100-1273	Phone Class A Adapter Module	Mounts to A100-1272, no additional space required	
*refer to document *AC4100-0034* for additional detail			

Table 6: LED and LED/Switch Modules, General Purpose*

LEDs per Switch	LEDs	Switches	SKU	LED Color(s)	SKU	LED Color(s)
One	8	8	A100-1280	Red	A100-1281	Yellow
Two	16	8	A100-1282	Red on top, Yellow on bottom	A100-1283	Yellow, top and bottom
Two	16	8	A100-1284	Red on top, Green on bottom		
One	16	16	A100-1285	Red	A100-1278	8 Red on left, 8 Yellow on right
* LED/switch controller and label kit is ordered separately **Note:** Refer to data sheet *AC4100-0032* for additional LED/Switch module selections.						

Table 7: LED and LED/Switch Modules, General Purpose*

LEDs per Switch	LEDs	Switches	SKU	LED Color(s)
LEDs only	8	LEDs only	A100-1276	Red, pluggable
LEDs only	16	LEDs only	A100-1277	Pluggable LEDs, shipped Red on top, Yellow on bottom
One	16	16	A100-1300	Pluggable LEDs, shipped Red on top, Yellow on bottom; Note: UL, ULC, and CSFM listed only
One	24	24	A100-1287	Red
* LED/switch controller and label kit is ordered separately **Note:** Refer to data sheet *AC4100-0032* for additional LED/Switch module selections.				

Table 8: LED/Switch Modules, Special Purpose*

SKU	Operation	Switch Function (Location)	LED Description
A100-1286	Eight function HOA (On, Off, Auto) Control Module with labeled switches	On (top)	Green LED
		Off (middle)	Red LED
		Auto (bottom)	Green LED
* LED/switch controller, label kit, and separate LEDs are ordered separately. **Note:** Refer to data sheet *AC4100-0032* for additional LED/Switch module selections.			

Table 9: LED/Switch Controller Modules and Accessories

SKU	Description	
A100-1288	64 LED/64 Switch Controller Module with mounting plate; controls up to 64 LEDs and interfaces to up to 64 switches; mounts behind the LED/switch modules and has provisions for one A100-1289 Controller Module	**Note:** LED/switch controllers and their connected LED/switch modules must be in the same bay; (see data sheet *AC4100-0032* for details)
A100-1289	64 LED/64 Switch Controller Module without mounting plate; mounts on extra space of A100-1288; controls an additional 64 LEDs and 64 switches	
4100-1294	LED/Switch Module Slide-in Labels, required when LED/switch modules are present; order one per cabinet	
A100-1290	24 Point I/O Module for external connections, select each point as either input or output; 2" (51 mm) wide, 1 Slot; refer to *AC4100-0032* for more detail; not available with A100-9611	
* LED kits for A100-1276/A100-1277/A100-1300 are in Product Selection **Note:** Refer to data sheet *AC4100-0032* for additional LED/Switch module selections.		

Table 10: Communication Modules*

SKU	Description	Size	Supv.	Alarm
A100-6038	Dual RS-232 Interface, mounts in Slot 3 or Slot 2	1 Slot	132 mA	132 mA
A100-9816	Master Clock Interface Module with one standard RS-232 port (see *AC4100-0033*)	1 Slot	132 mA	132 mA
* not available with A100-9611				

Table 11: Panel Mounted Printer

SKU	Description
A100-1293	Panel Mount Thermal Printhead Printer, supplied with one roll of paper; requires 3 expansion slots
4190-9803	Replacement Paper for A100-1293 Printer, one roll
* not available with A100-9611, refer to document *AC4100-0032* for additional detail	

Table 12: Power Supplies and Accessories

SKU	Voltage/Listing		Description	Size	Supv.	Alarm
A100-5125	120 VAC	UL				
A100-5127	220/230/240 VAC	UL	**Remote Power Supply (RPS)**; 9 A power supply with battery charger; Canadian model has low battery cutout; **required for A100-9610, not available with A100-9611**	4 Blocks	150 mA	185 mA
A100-0636	Box Interconnection Harness Kit; **order one for each close-nippled cabinet;** also used if power is supplied from host fire alarm control panel					

Table 13: Power Distribution Modules

SKU	Voltage	Description	
A100-0634	120 VAC	Power Distribution Module (PDM); select per system voltage	**Required for A100-9610, select one per box or cabinet rack; not applicable for A100-9611**
A100-0635	220/230/240 VAC		

Table 14: Miscellaneous Accessories

SKU	Description	
A100-2300	Expansion Bay Hardware, **order one for each expansion bay** (unless included with selected option)	
A100-1279	Single blank 2" display cover, order as required (8 fill a bay front); 2 max. between LED/switch modules	
4100-9835	Termination and Address Label Kit (for module marking); provides additional labels for field installed modules	
A100-0632	Terminal Block Utility Module; provides 2, 16 position terminal blocks mounted on 4" x 5" single block size, capable of up to 12 AWG wire (3.31 mm^2)	
A100-0633	Door Tamper Switch (connects to Transponder Interface Module)	
4100-9843	Yellow	Kits of 8 LEDs; order as required for A100-1276/1277/1300 modules
4100-9844	Green	
4100-9845	Red	

General Specifications

Table 15: Input Power

Specification	Details	
Remote Power Supplies (RPS)	120 VAC Models	4 A maximum @ 102 to 132 VAC, 60 Hz
	220-240 VAC Models	2 A maximum @ 204 to 264 VAC, 50/60 Hz; separate taps for 220/230/240 VAC

Table 16: Power Supply Output Ratings for the Remote Power Supply (RPS)

| Specification	Details		
Total Power Supply Output Rating	9 A total @ nominal 28 VDC, including module currents and auxiliary power outputs		Output switches to battery backup during mains AC failure or brownout conditions
Auxiliary Power Tap	2 A maximum	Rated 19.1 to 31.1 VDC	
NACs Programmed for Auxiliary Power	2 A maximum per NAC, 5 A maximum total		

Table 17: Battery Charger, Remote Power Supply (RPS) (sealed lead-acid batteries)

Specification	Details
Battery capacity range	UL listed for battery charging of 6.2 Ah up to 110 Ah (batteries larger than 50 Ah require a remote battery cabinet); ULC listed for charging up to 50 Ah batteries
Charger characteristics and performance	Temperature compensated, dual rate, recharges depleted batteries within 48 hours per UL Standard 864, to 70% capacity in 12 hours per ULC Standard S527

Table 18: Environmental

Specification	Details
Operating Temperature Range	32° to 120°F (0° to 49° C)
Operating Humidity Range	Up to 93% RH, non-condensing @ 90° F (32° C) maximum

AUTOCALL

Remote Annunciator Panels

Single Slot LED/Switch Module Detail Reference
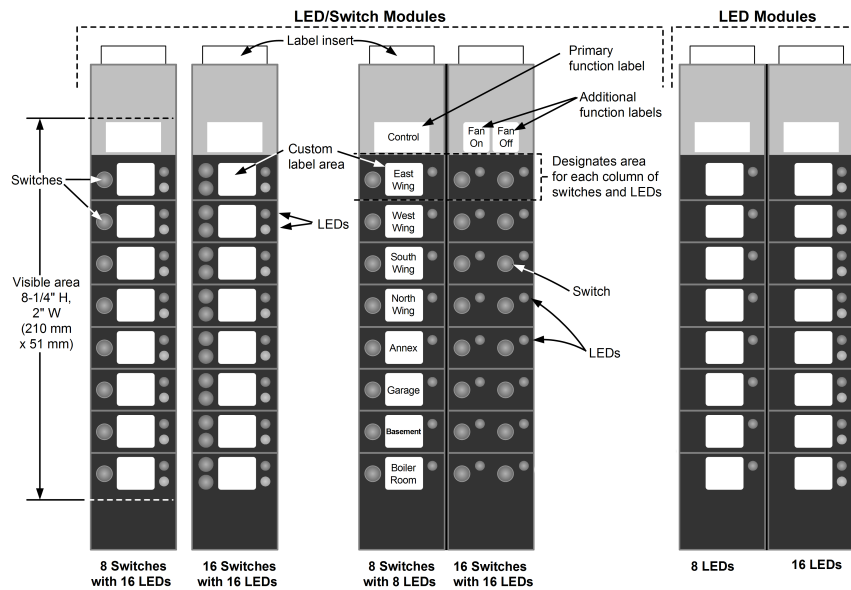
Note: See table for LED color information

Figure 9: Detail reference

Table 19: LED/Switch reference

Module no.	No. of switches	No. of LEDs	LED color	LED position
A100-1276	-	8	red	-
A100-1277	-	16	red	left
			yellow	right
A100-1278	16	16	red	top
			yellow	bottom
A100-1280	8	8	red	-
A100-1281	8	8	yellow	-
A100-1282	8	16	red	top
			yellow	bottom
A100-1283	8	16	yellow	top
			yellow	bottom
A100-1284	8	16	red	top
			green	bottom
A100-1285	16	16	red	-
A100-1300	16	16	red	top
			yellow	bottom

Dual Slot LED/Switch Module Detail Reference

Label insert

One switch per control, on/off

Primary function labels

Custom label area

Green LED (On)
Red LED (Off)
Green LED (Auto)

Red LEDs

Visible area
8 1/4" H, 2" W
(210 mm x 51 mm)

One switch per function

24 switches, 24 LEDs*
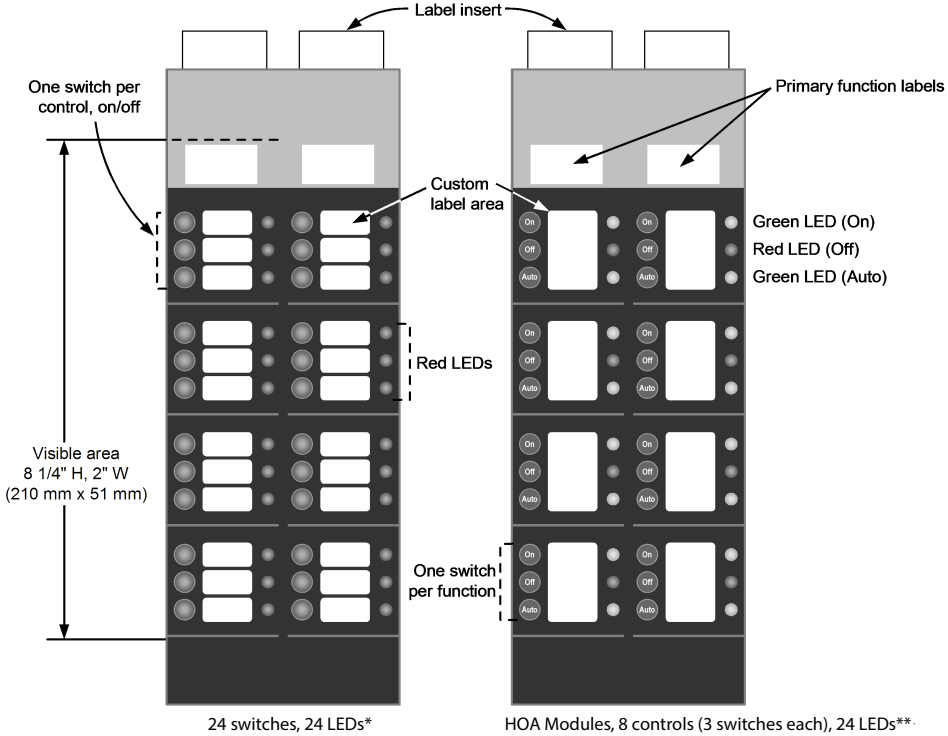
HOA Modules, 8 controls (3 switches each), 24 LEDs**

Figure 10: Detail reference

* A100-1287
** A100-1286, with labeled switches (shown)

AUTOCALL

AC4100-0038 Rev 13 6/2013