

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 page 5 and to data sheet S4100-0045 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

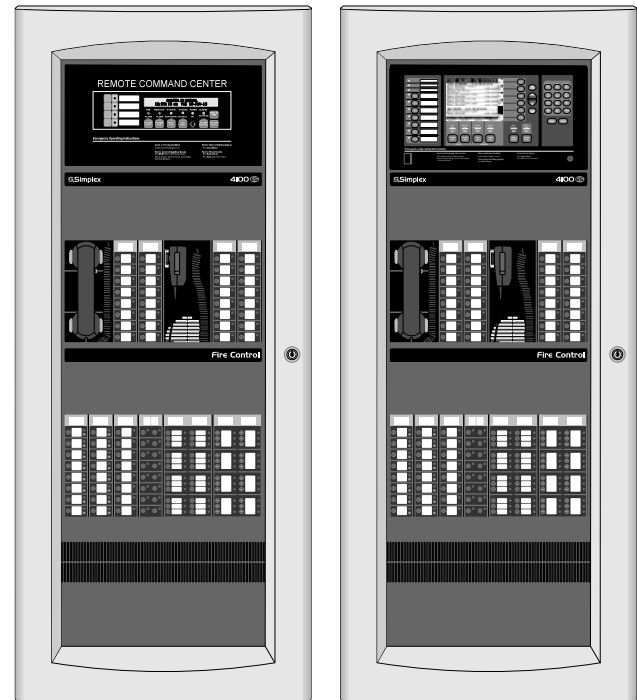
Wiring requirements:

- 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

* See page 4 for additional listing details. This product has been approved by the California State Fire Marshal (CSFM) pursuant to Section 13144.1 of the California Health and Safety Code. See CSFM Listing 7165-0026:0251 for allowable values and/or conditions concerning material presented in this document. Additional listings may be applicable; contact your local Simplex® product supplier for the latest status. Listings and approvals under Simplex Time Recorder Co. are the property of Tyco Fire Protection Products.



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.

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.

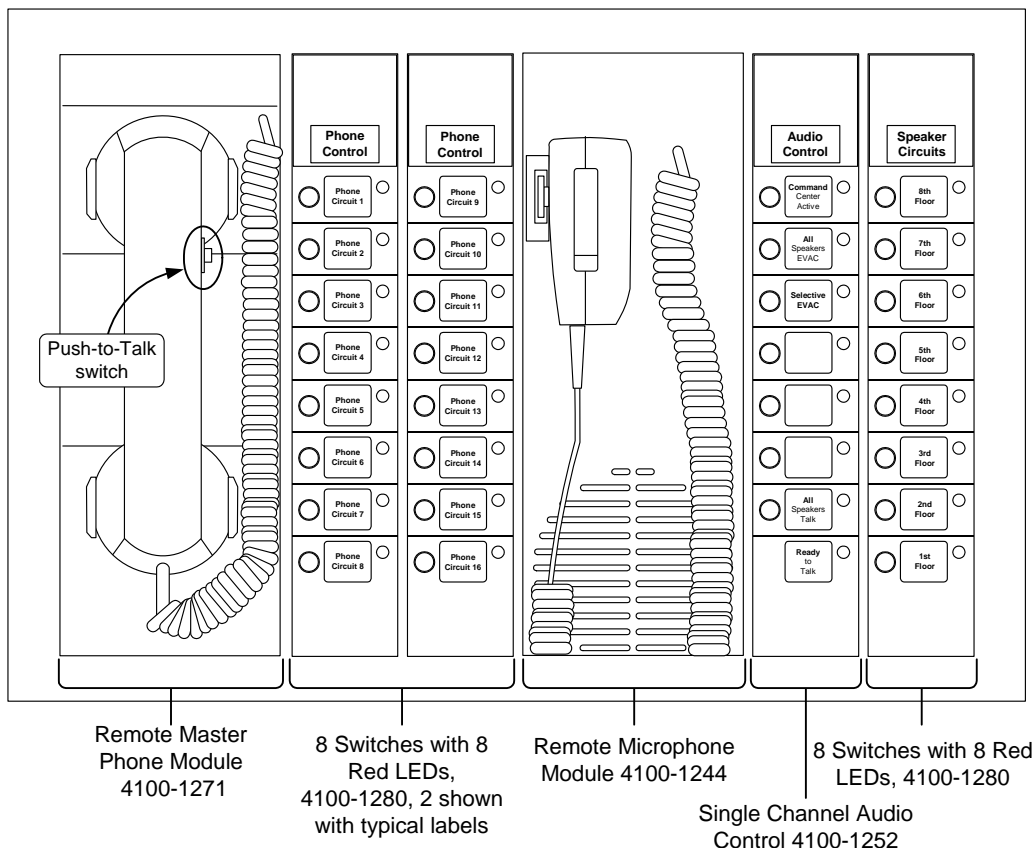
4100-9610 Remote Annunciator. This model is for applications that may require a full complement of the Remote Annunciator functions (refer to the product selection lists on pages 3 and 4). Power is from a cabinet mounted Remote Power Supply (RPS).

4100-9611 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 4100-9611)

Remote Annunciator Audio Module Reference

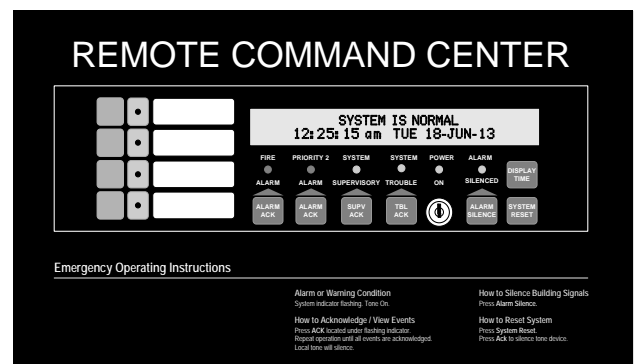


Packaging Availability

- 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 S4100-0037 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 4603-9101 (reference document S4603-0001).



4100-1292 Remote Command Center

Product Selection

Panel Type

Model	Description	Details and Mounting Reference
4100-9610	Remote Annunciator Panel; requires an internal power supply	Includes a bay assembly with power distribution board, a Basic Transponder Interface Module (4100-0620) mounted in Block A, and an interconnect harness for connecting to 4100ES/4100U Slot modules Supervisory and Alarm current = 87 mA
4100-9611	Basic Remote Annunciator Panel; requires power from another cabinet (refer to module exclusion list on page 2)	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

Remote Command Center Option (for InfoAlarm Command Center expanded content display products, refer to data sheet S4100-0045)

Model	Description	Details and Mounting Reference
4100-1292	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/4100U flat modules are allowed behind it; RUI device, RUI/RUI+ connection is required Supervisory current = 65 mA (w/o backlight) Alarm current = 140 mA

Emergency Voice/Alarm Communications Operator Interface Options

Model	Description	Details and Mounting Reference
4100-1244	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
4100-1252	1 Channel (audio or mike)	Operator Interface Modules Single slot modules requiring connection to an LED/switch controller; space behind accepts 4100ES/4100U flat modules only; adjacent LED/switch module(s) are required for specific speaker circuit selection (refer to document S4100-0034 for audio reference and document S4100-0032 for LED/switch module reference); Supv. = 0, Alarm = 24 mA
4100-1253	1.5 Channel (audio + mike)	
4100-1254	2 Channel (full audio)	
4100-1255	3-8 Channel	

Firefighter Telephone System Products (refer to document S4100-0034 for additional detail)

Model	Description	Details and Mounting Reference
4100-1271	Remote Master Telephone	Mounts in two vertical blocks of bay front, locate as required; space behind allows 4100ES/4100U flat modules only
4100-1272	Phone Module with 3 Class B phone NACs	Single Block module, mounts to bay mounting plate
4100-1273	Phone Class A Adapter Module	Mounts to 4100-1272, no additional space required

LED and LED/Switch Modules, General Purpose (LED/switch controller and label kit is ordered separately)*

LEDs per Switch	LEDs	Switches	Model	LED Color(s)	Model	LED Color(s)
One	8	8	4100-1280	Red	4100-1281	Yellow
Two	16	8	4100-1282	Red on top, Yellow on bottom	4100-1283	Yellow, top and bottom
Two	16	8	4100-1284	Red on top, Green on bottom	4100-1296	Green on top, Yellow on bottom
One	16	16	4100-1285	Red	4100-1278	8 Red on left, 8 Yellow on right
LEDs per Switch	LEDs	Switches	Model	LED Color(s)		
LEDs only	8	LEDs only	4100-1276	Red, pluggable		
LEDs only	16	LEDs only	4100-1277	Pluggable LEDs, shipped Red on top, Yellow on bottom		
One	16	16	4100-1300	Pluggable LEDs, shipped Red on top, Yellow on bottom; Note: UL, ULC, and CSFM listed only		
One	24	24	4100-1287	Red		

LED/Switch Modules, Special Purpose (LED/switch controller, label kit, and separate LEDs are ordered separately)*

Model	Operation	Switch Function (Location)	LED Description
4100-1286	Eight function HOA (On, Off, Auto) Control Module with labeled switches	On (top)	Green LED
		Off (middle)	Red LED
		Auto (bottom)	Green LED
4100-1295	Eight function HOA (On, Off, Auto) Control Module, same as 4100-1286 except switches are unlabeled		

LED/Switch Controller Modules and Accessories (LED kits for 4100-1276/1277/1300 are on page 4)*

Model	Description	
4100-1288	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 4100-1289 Controller Module	NOTE: LED/switch controllers and their connected LED/switch modules must be in the same bay; (see data sheet S4100-0032 for details)
4100-1289	64 LED/64 Switch Controller Module without mounting plate; mounts on extra space of 4100-1288; 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	
4100-1290	24 Point I/O Module for external connections, select each point as either input or output; 2" (51 mm) wide, 1 Slot; refer to S4100-0032 for more detail; not available with 4100-9611	

* **Note:** Refer to data sheet S4100-0032 for additional LED/Switch module selections.

(continued)

Product Selection (Continued)

Communication Modules (not available with 4100-9611)

Model	Description	Size	Supv.	Alarm
4100-6038	Dual RS-232 Interface, mounts in Slot 3 or Slot 2	1 Slot	132 mA	132 mA
4100-9816	Master Clock Interface Module with one standard RS-232 port (see S4100-0033)	1 Slot	132 mA	132 mA

Panel Mounted Printer (not available with 4100-9611, refer to document S4100-0032 for additional detail)

Model	Description
4100-1293	Panel Mount Thermal Printhead Printer, supplied with one roll of paper; requires 3 expansion slots
4190-9803	Replacement Paper for 4100-1293 Printer, one roll

Power Supplies and Accessories

Model	Voltage/Listing	Description	Size	Supv.	Alarm
4100-5125	120 VAC	Remote Power Supply (RPS) ; 9 A power supply with battery charger; Canadian model has low battery cutout; required for 4100-9610, not available with 4100-9611	4 Blocks	150 mA	185 mA
4100-5126	120 VAC, Canadian				
4100-5127	220/230/240 VAC				
4100-0636	Box Interconnection Harness Kit; order one for each close-nippled cabinet ; also used if power is supplied from host fire alarm control panel				

Power Distribution Modules

Model	Voltage	Description
4100-0634	120 VAC	Power Distribution Module (PDM); select per system voltage
4100-0635	220/230/240 VAC	
Required for 4100-9610, select one per box or cabinet rack; not applicable for 4100-9611		

Miscellaneous Accessories

Model	Description
4100-2300	Expansion Bay Hardware, order one for each expansion bay (unless included with selected option)
4100-1279	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
4100-0632	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)
4100-0633	Door Tamper Switch (connects to Transponder Interface Module)
4100-9843	Yellow
4100-9844	Green
4100-9845	Red
Kits of 8 LEDs; order as required for 4100-1276/1277/1300 modules	

General Specifications

Input Power

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

Power Supply Output Ratings for the Remote Power Supply (RPS)

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	
NACs Programmed for Auxiliary Power	2 A maximum per NAC, 5 A maximum total	
		Rated 19.1 to 31.1 VDC

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

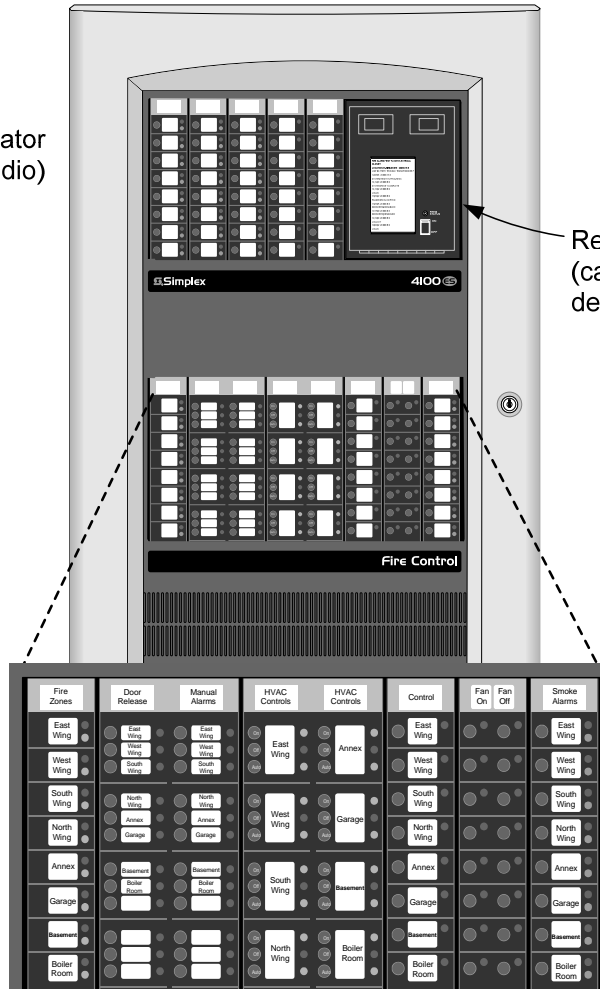
Battery capacity range	UL listed for battery charging of 6.2 Ah up to 110 Ah (batteries larger than 50 Ah require a remote battery cabinet); ULC listed for charging up to 50 Ah batteries
Charger characteristics and performance	Temperature compensated, dual rate, recharges depleted batteries within 48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

Environmental

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

Two Bay Remote Annunciator LED/Switch Module Reference

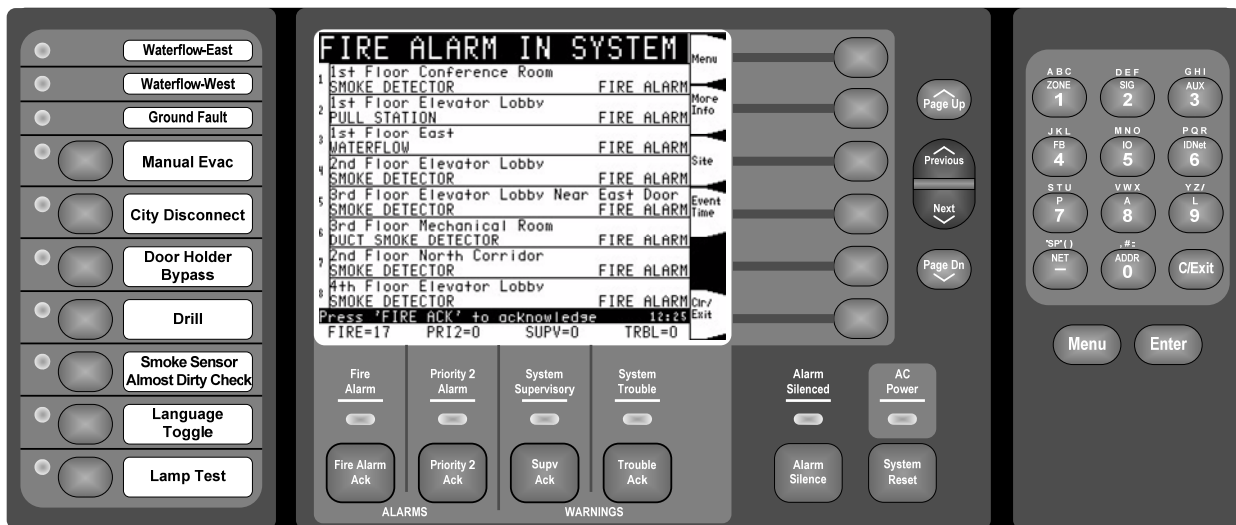
Two bay Remote Annunciator Panel (non-Audio)



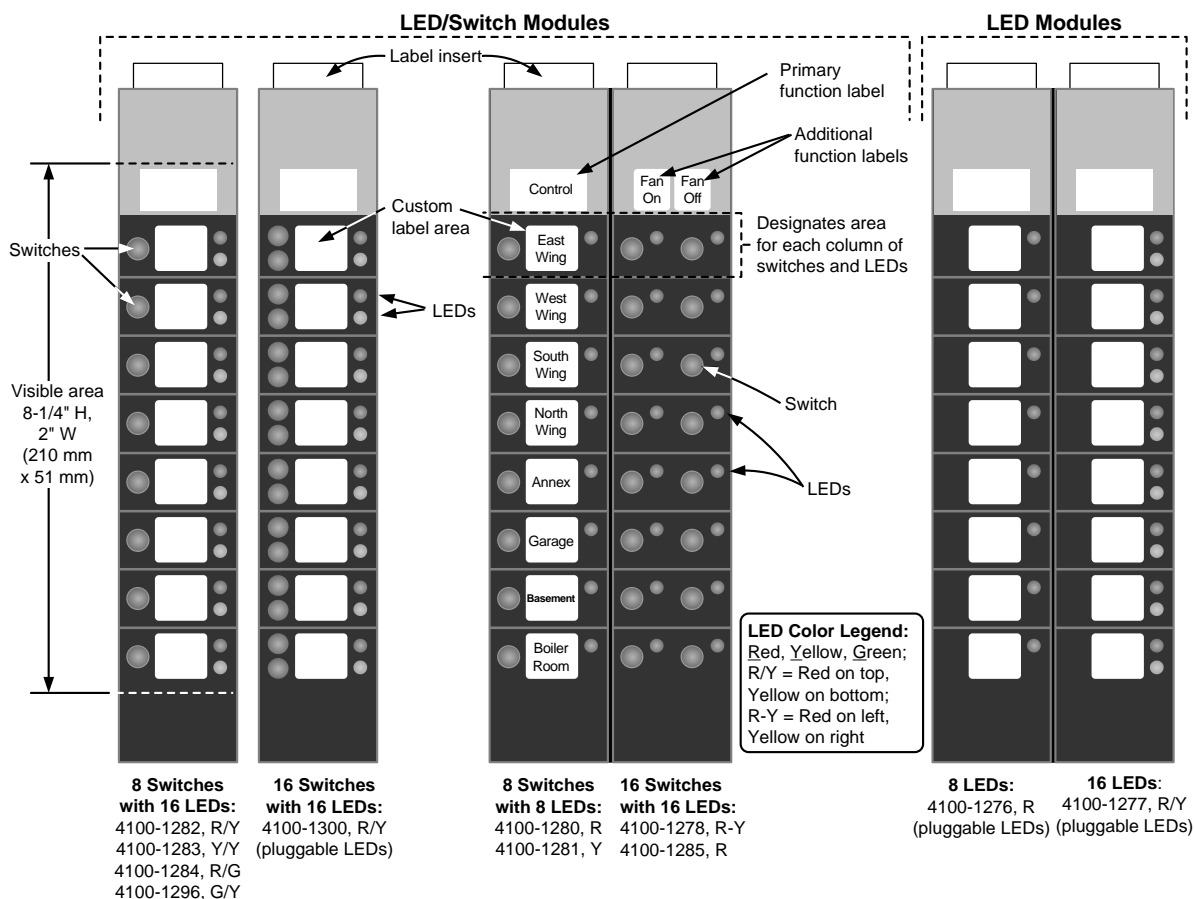
Remote Printer option (can be located where desired)

Typical non-audio LED/Switch and LED modules, with sample module labeling

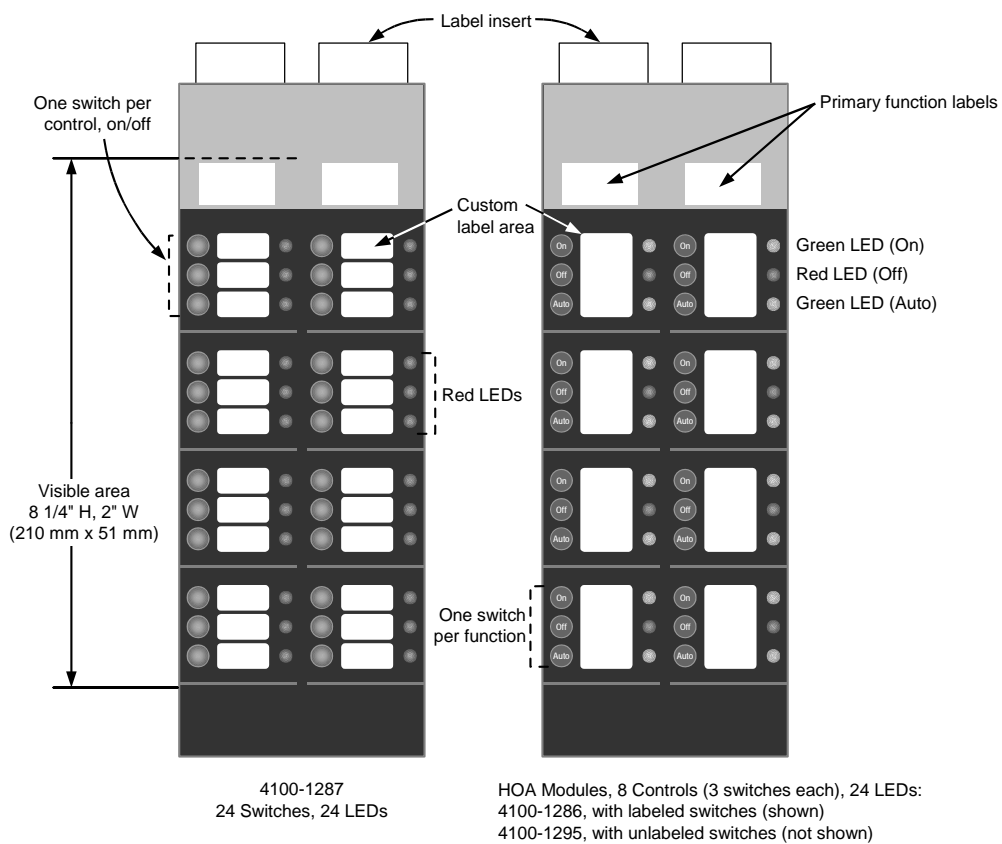
InfoAlarm Command Center Detail Reference



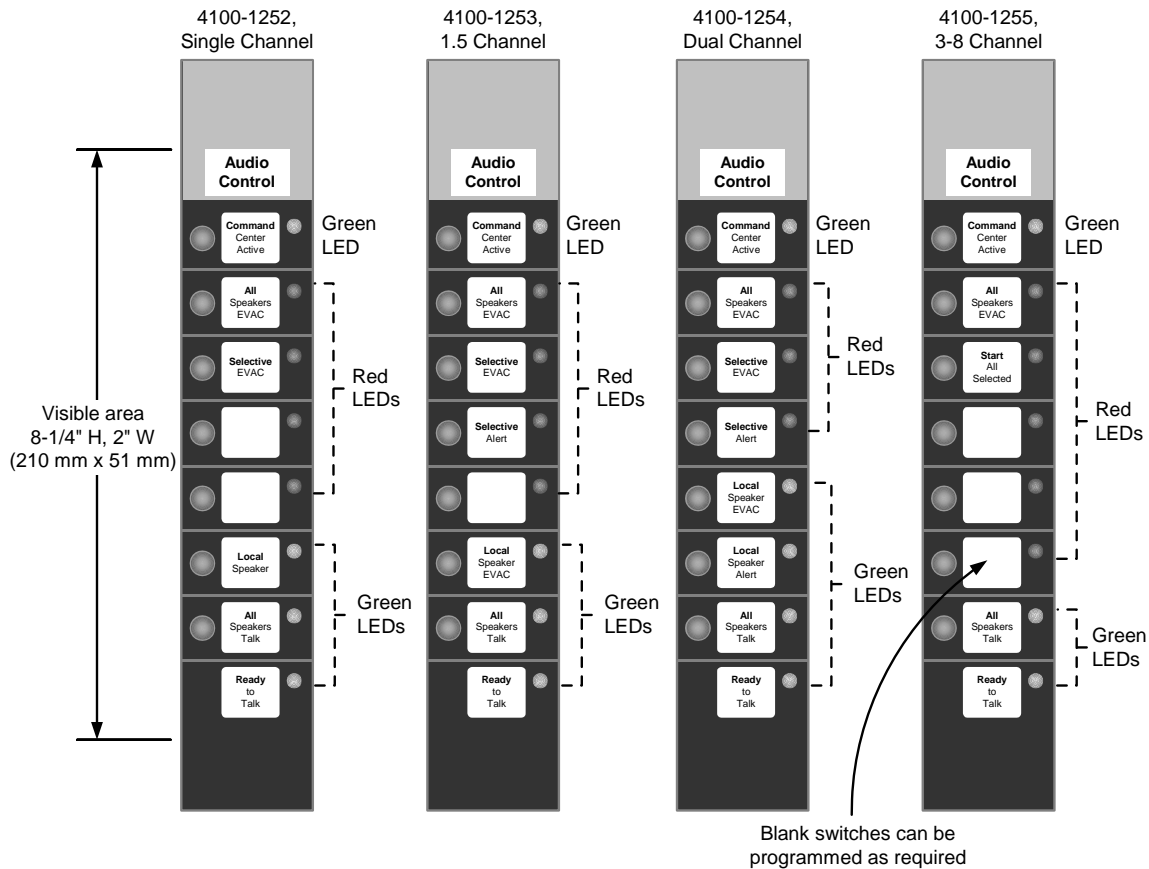
Single Slot LED/Switch Module Detail Reference



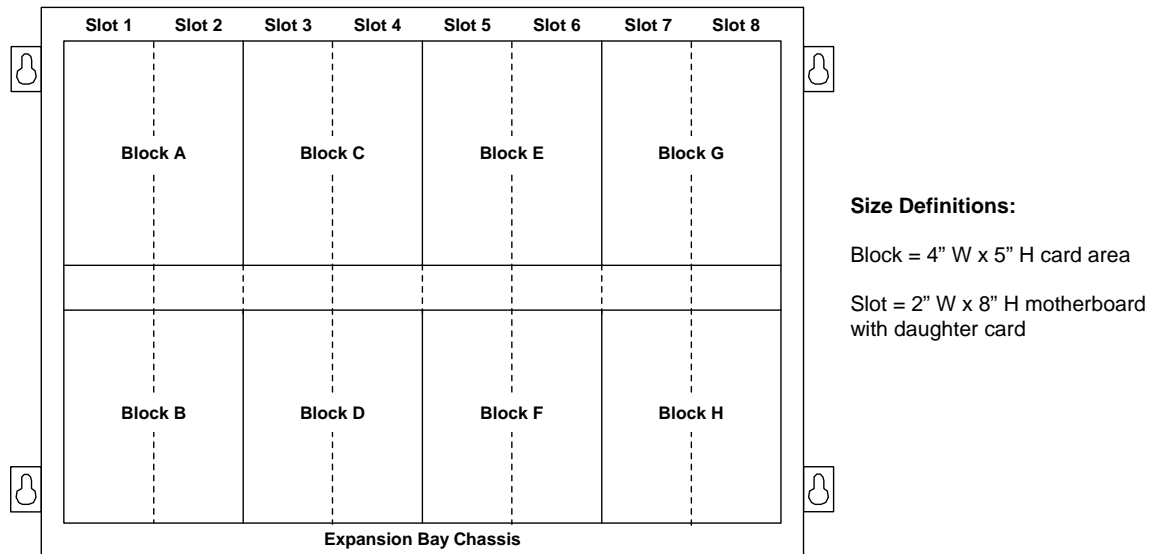
Dual Slot LED/Switch Module Detail Reference



Audio Control Module Detail



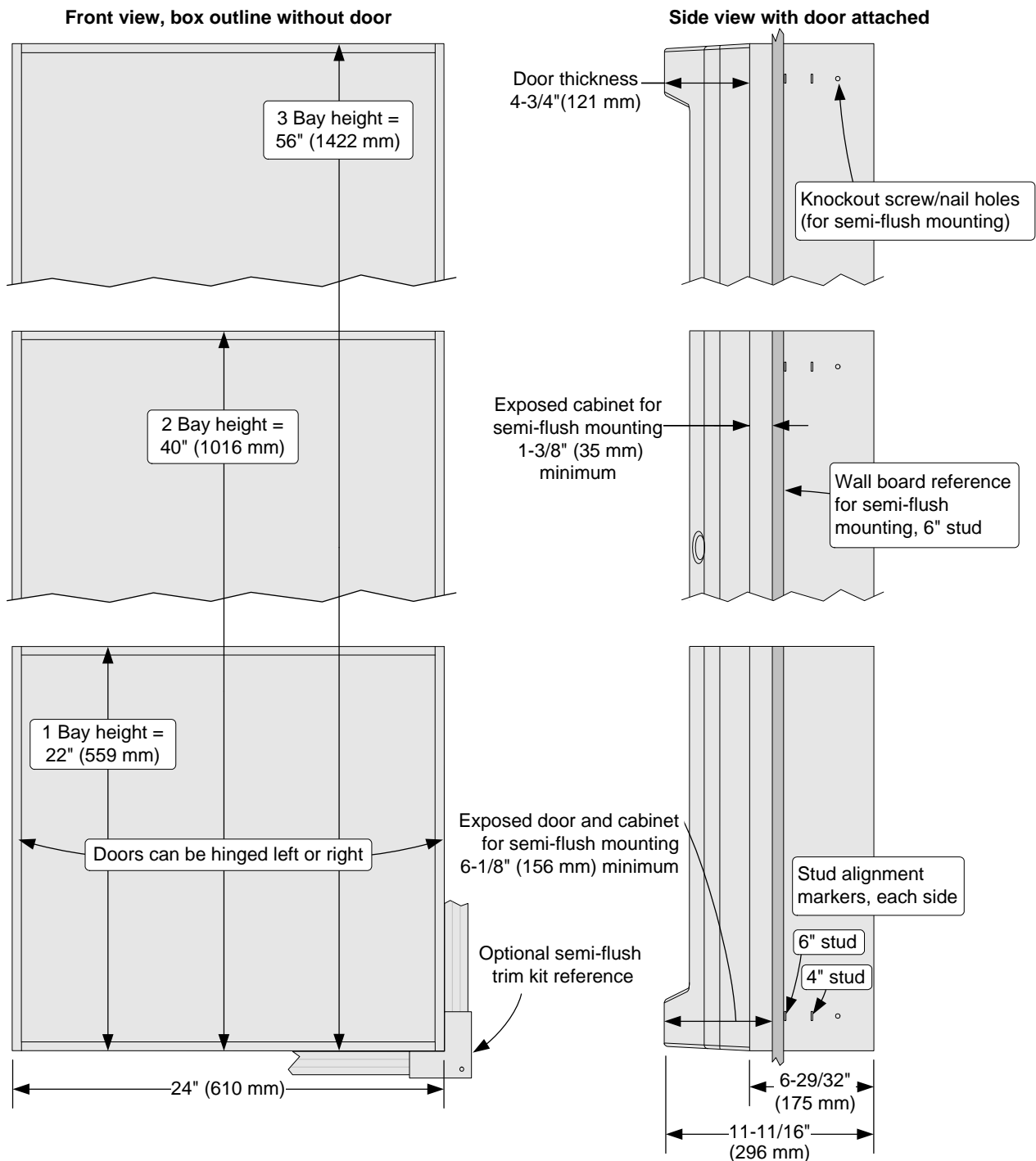
Expansion Bay Module Loading Reference



Additional 4100ES Data Sheet Reference

Subject	Data Sheet	Subject	Data Sheet
4100ES Panels	S4100-0100	LED/Switch Modules	S4100-0032
InfoAlarm Command Center	S4100-0101	4100ES Basic Panel Modules	S4100-0031
Network Display Unit (NDU)	S4100-0102	MINIPLEX Transponders	S4100-0035
MINIPLEX Transponders	S4100-0103	Network Display Unit (NDU)	S4100-0036
Enclosures	S4100-0037	Remote Battery Charger	S4081-0002
4100ES/4100U Audio/Phone Modules	S4100-0034		

Wall Mounted Enclosure 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.

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