

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

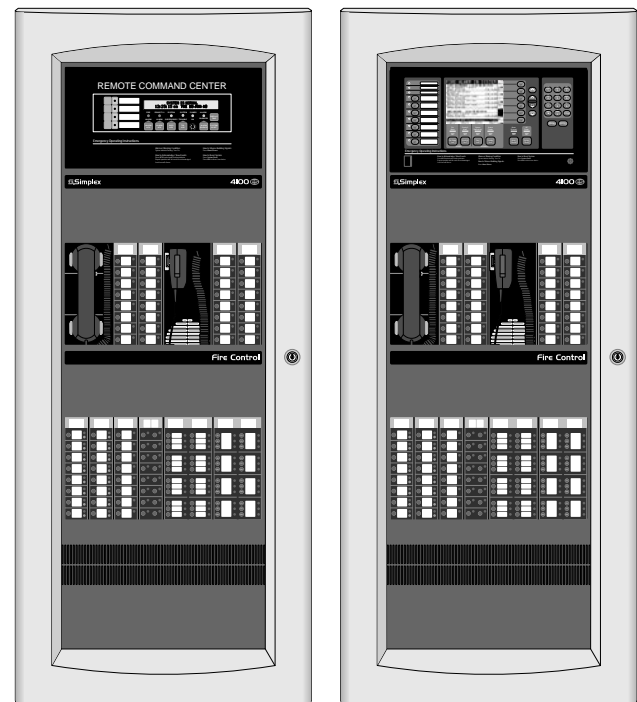
Wiring requirements:

- 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.

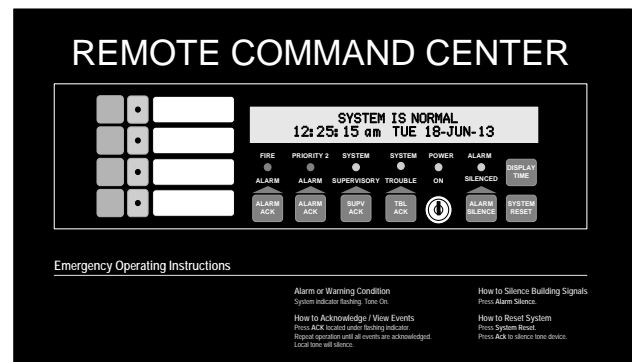
The Battery Compartment (bottom) accepts two batteries, up to 50 Ah. Battery mounting does not interfere with available module space. (Not applicable to the model 4100-9611)

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

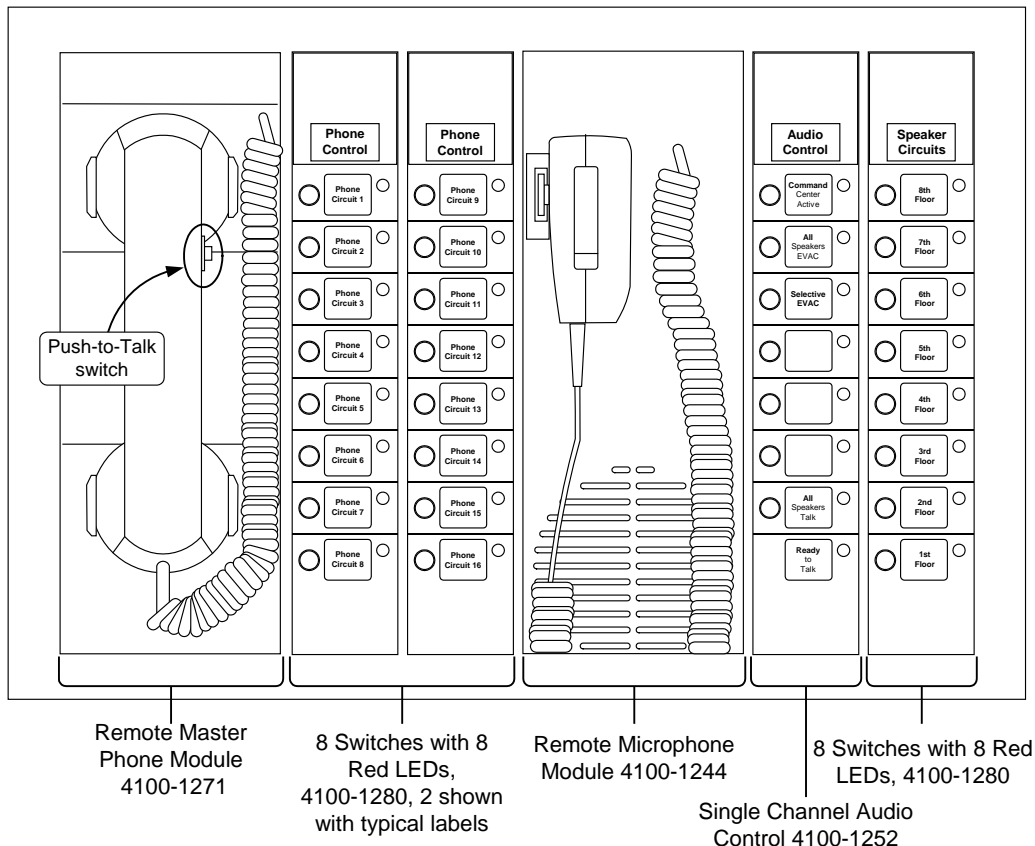
Remote Command Center

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

Remote Annunciator Audio Module Reference



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)

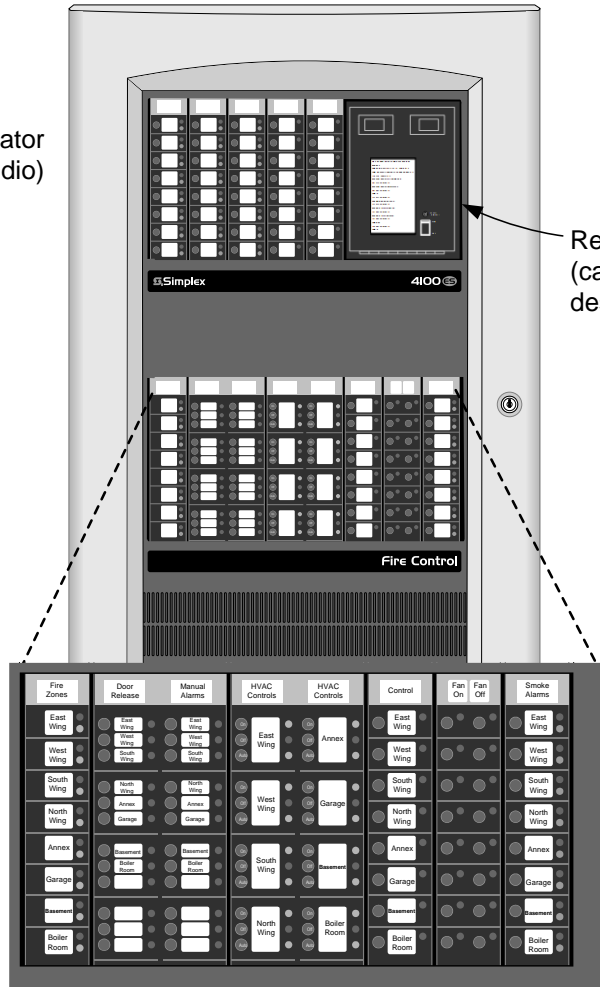
| | |
|-----------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Battery capacity range | UL listed for battery charging of 6.2 Ah up to 110 Ah (batteries 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

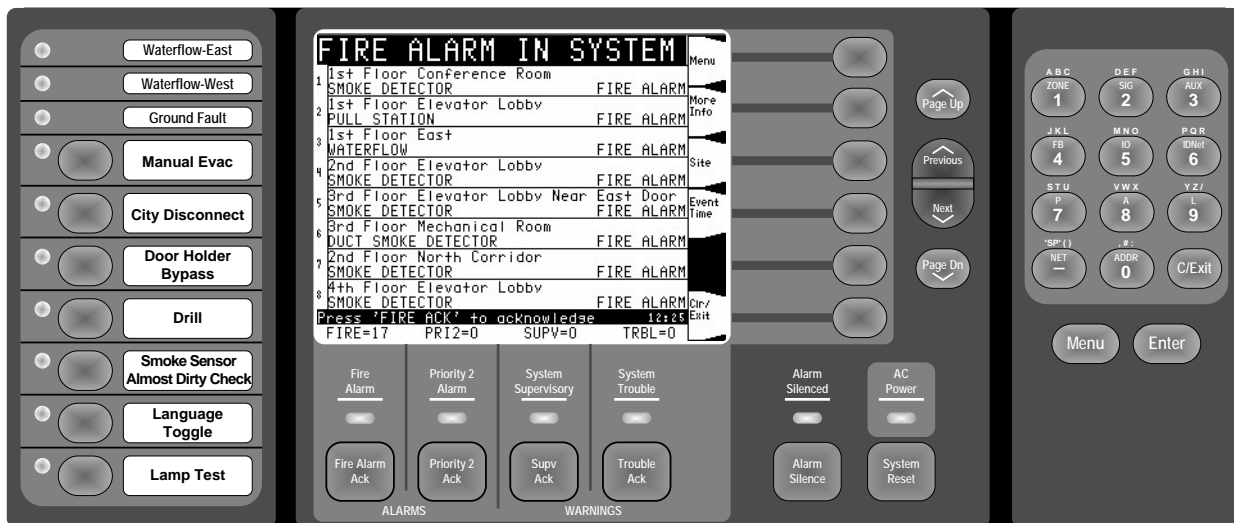
Two bay Remote Annunciator Panel (non-Audio)



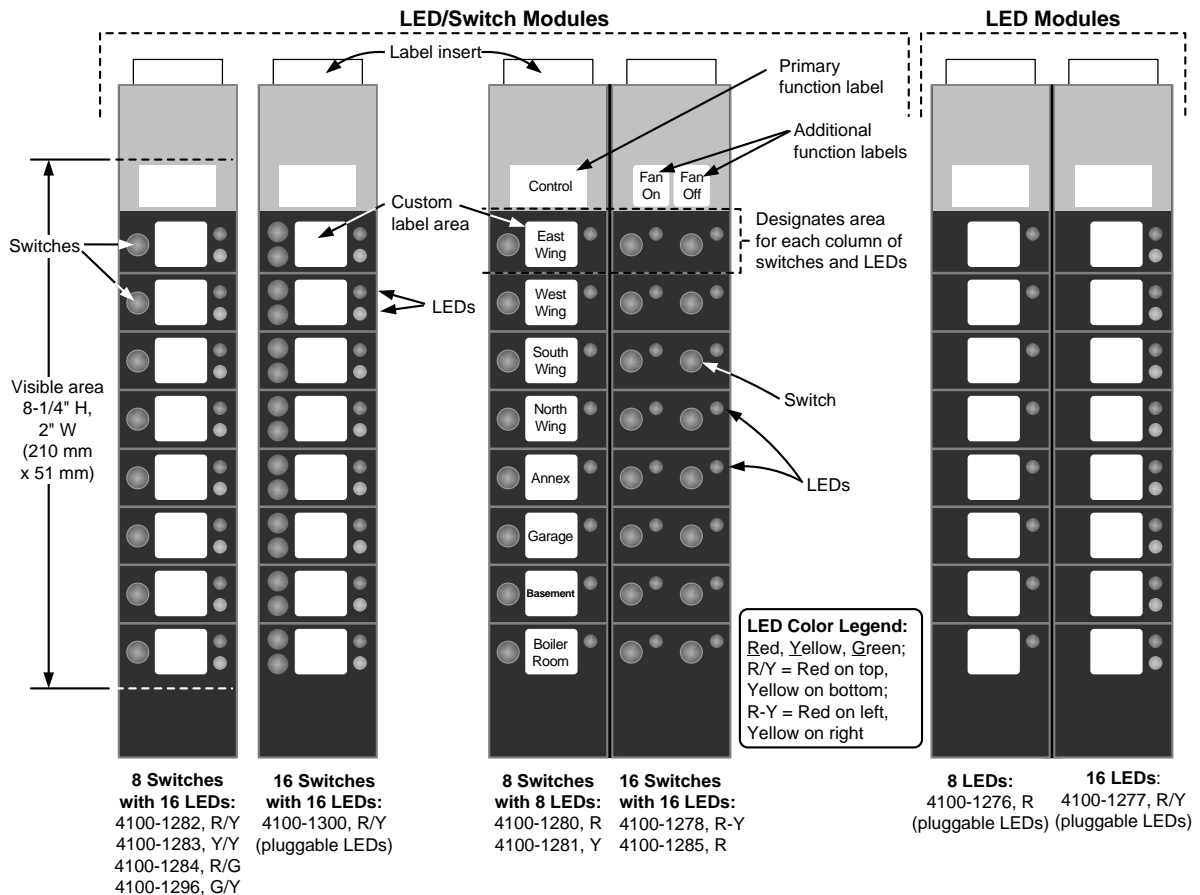
Remote Printer option (can be located where desired)

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

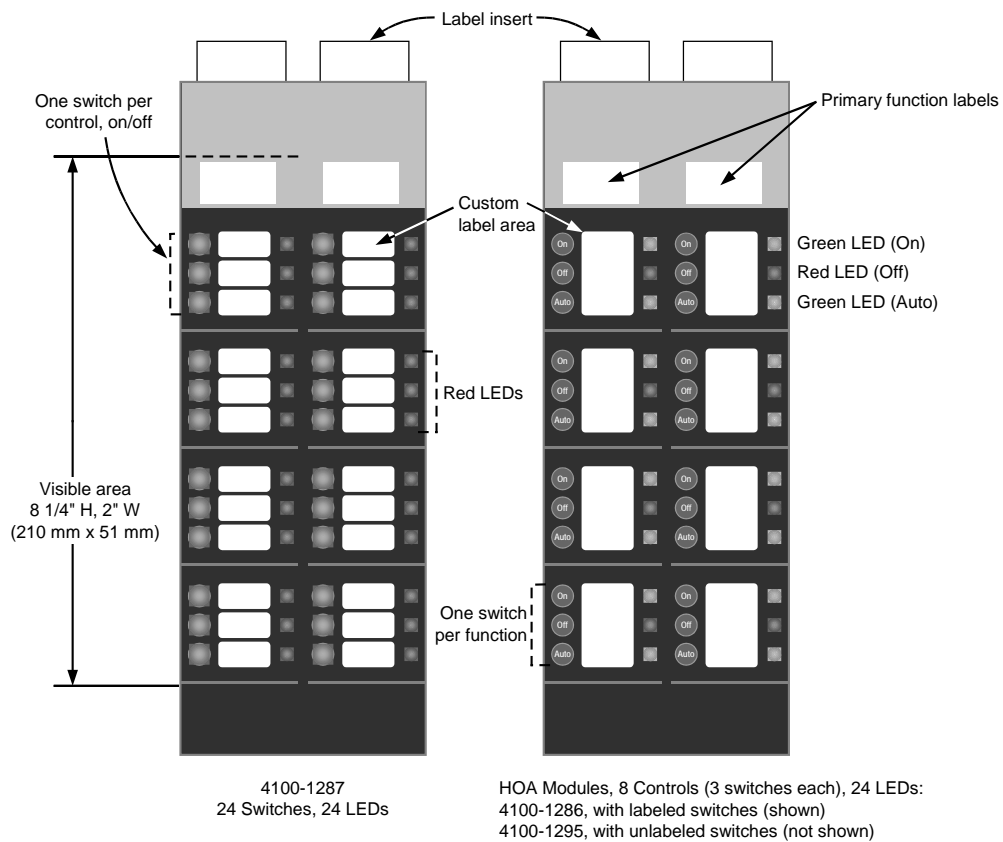
InfoAlarm Command Center Detail Reference



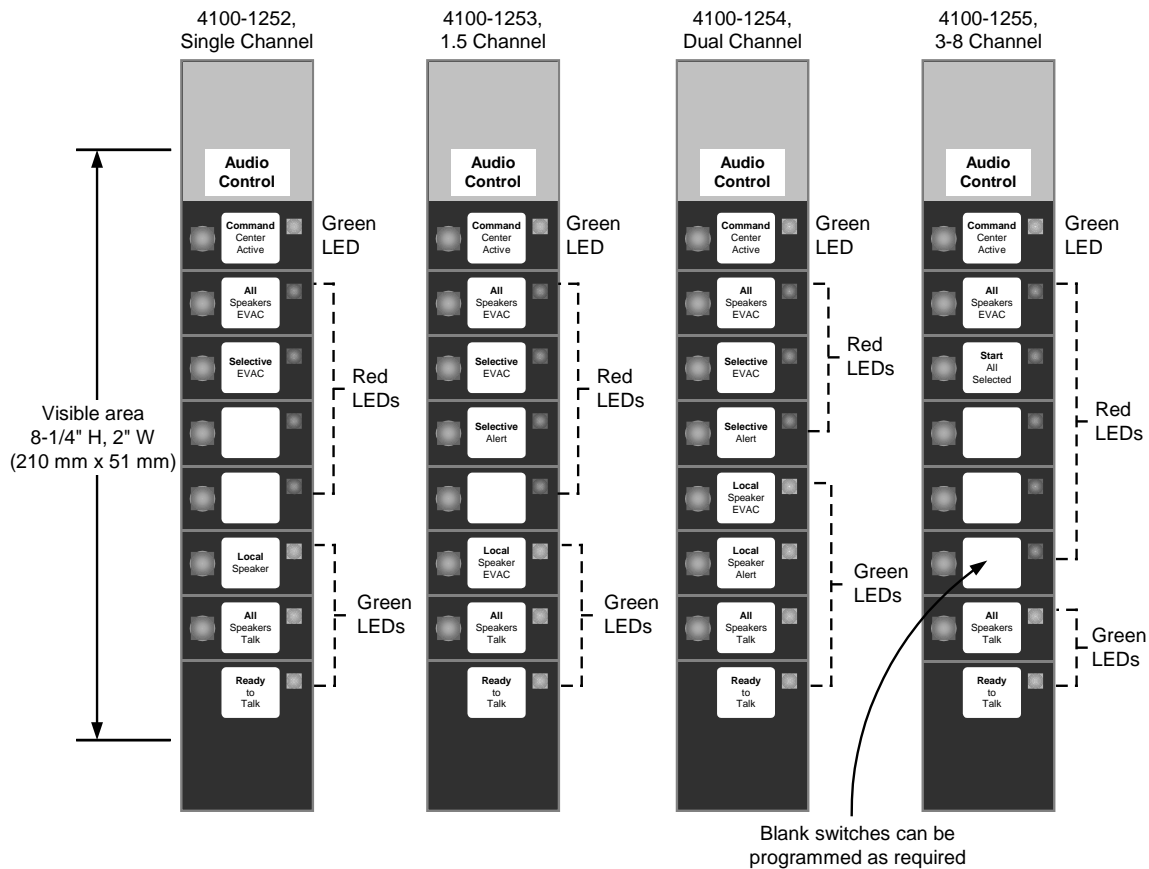
Single Slot LED/Switch Module Detail Reference



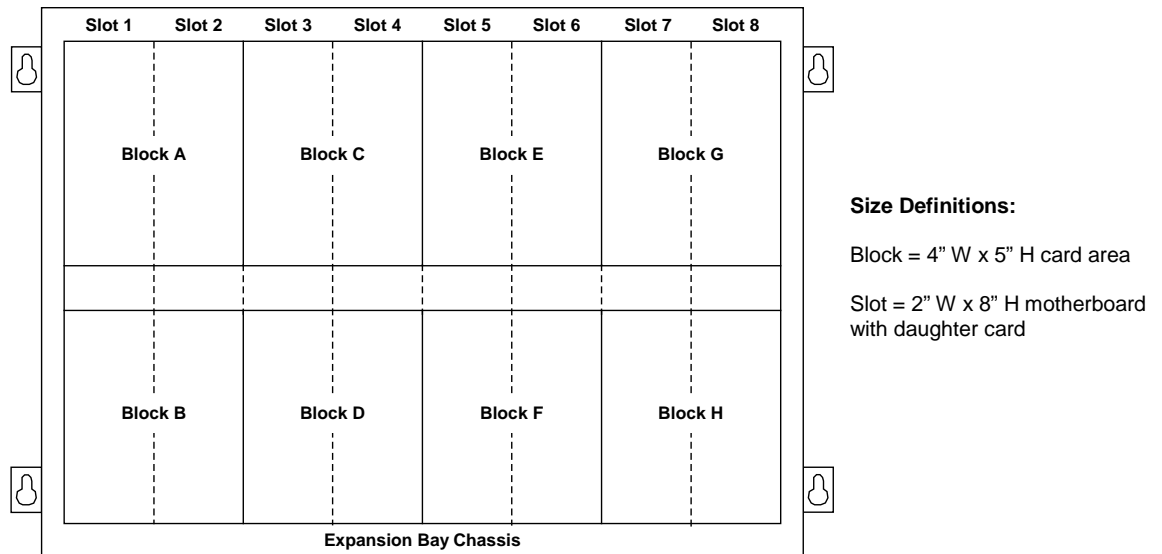
Dual Slot LED/Switch Module Detail Reference



Audio Control Module Detail



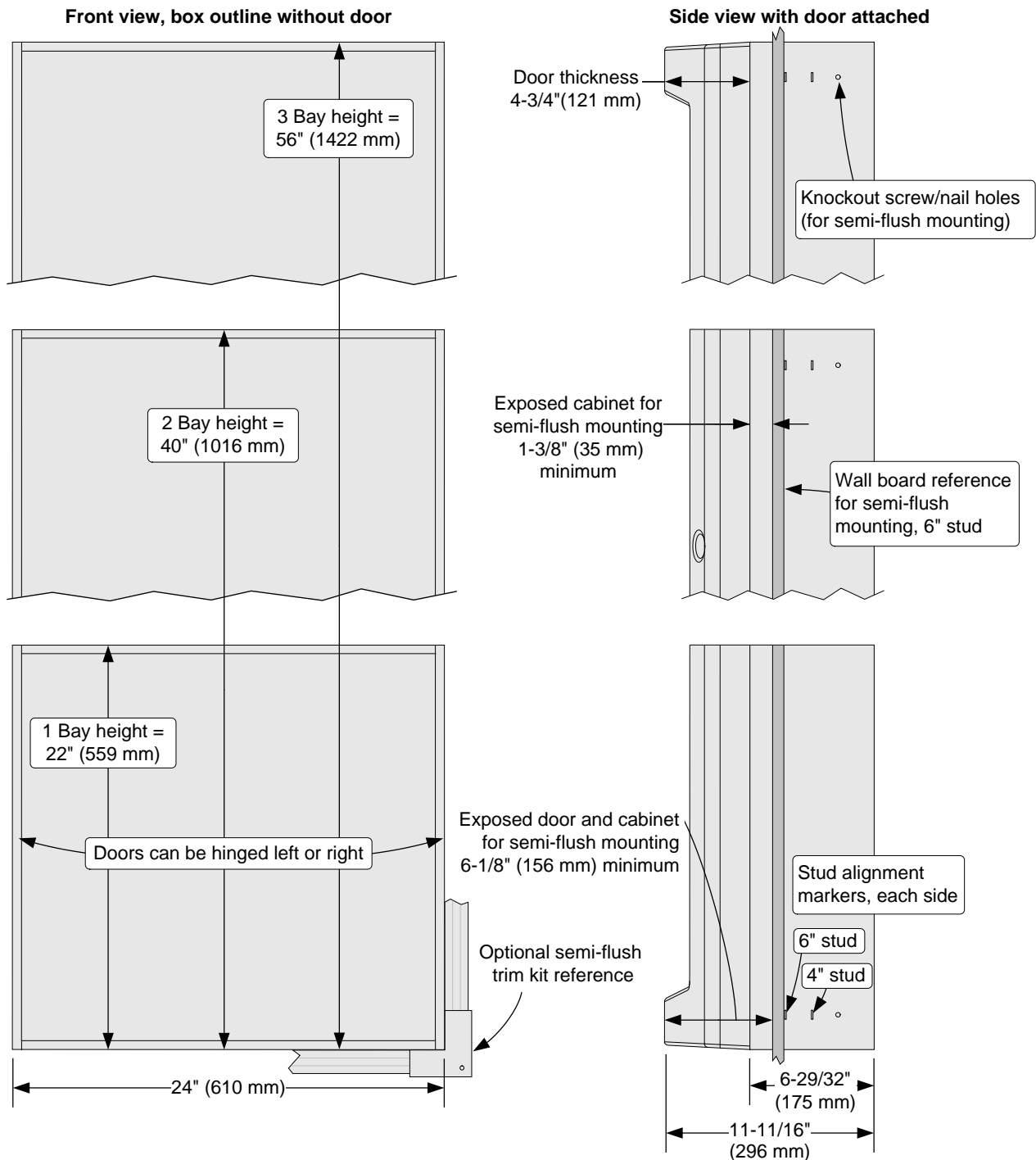
Expansion Bay Module Loading Reference



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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