AUTOCALL

*UL, ULC Approved**

4100ES Fire Control Panels

InfoAlarm Command Center for the 4100ES Fire Alarm Control Panel

Features

Multi-line expanded content display interface for Autocall 4100ES Series fire alarm control panels, available with the following products:

- Fire alarm control panels (stand-alone or networked) including Redundant CPU options (Software Revision 12 or higher is required)
- Network Display Units (NDU) with support for up to 12,000 points
- Remote Annunciator panels and models that mount in a dedicated cabinet (4100ES control panels support Remote InfoAlarm Command Centers independent of host panel display type)
- Upgrade kits are available for 4100ES standard panels
- UL listed to Standard 864

InfoAlarm Command Centers provide customized operating convenience:

- "Activity in System" primary display choices include: First and Most Recent, First 5 and Most Recent, First 8, Site Plan with activity status icons, General Alarm, or Direct to List; selectable individually by event type
- System reports are easily viewed; logs can be read with minimal scrolling required
- Up to six "softkeys" per screen provide functions that vary with the particular screen information aiding operators to determine how to proceed
- Up to two languages are available per system, easily selected by programmable key press (systems with IMS/GCC/NPU or 2 x 40 LCD panels or annunciators require one language to be the default font)
- International models allow customized language legends for operator keys and status LEDs
- Information sent to Remote InfoAlarm Command Centers can be vectored by point

Display properties:

- 320 x 240 dot matrix (QVGA) display provides an active area of 4.53" W x 3.4" H (115 mm x 86 mm) displaying up to 854 characters using standard ASCII character font
- Bright white LED backlighting provides efficient and long lasting illumination; operation is selectable as continuous or off with power fail or with no key presses

Introduction

Displaying more information. 4100ES Controls using the InfoAlarm Command Center provide an expanded content, multi-line LCD interface that requires minimal key presses to access detailed information. Because it is system-powered, its detailed information is provided without requiring separate supplementary equipment.

InfoAlarm Command Center Control Panel. By using a larger area format instead of an individual text line display, the LCD provides text information for Alarm, Supervisory, or Trouble. The format is flexible and able to be customized per application allowing additional information to be presented to suit the specific application.

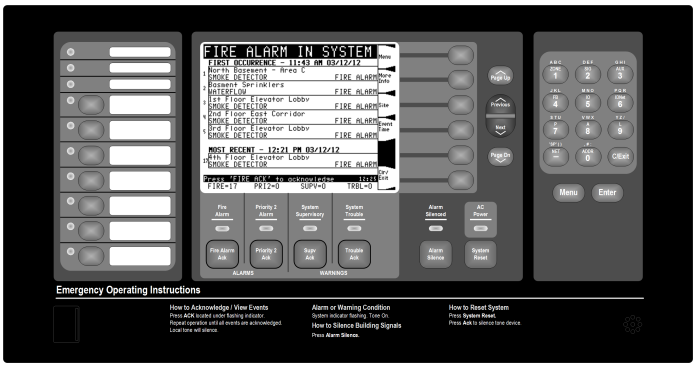

Figure 1: InfoAlarm Command Center for Control Panel Mounting

Figure 2: InfoAlarm Command Center in Remote Cabinet

Description

InfoAlarm Command Centers for 4100ES fire alarm systems provide a large display with extended information content, dual language support including 2 byte character languages, and an intuitive control key interface per the following:

- Up to 10 InfoAlarm Command Centers are supported per 4100ES control panel; able to allow one InfoAlarm Command Center to take-control and to designate access levels for interfaces not in-control; LEDs can be programmed for in-control status indications
- Menu-driven format conveniently prompts operators for the next action required
- Key controls are provided to select the highlighted entry, load next screen of information, or jump to top or bottom of activity lists
- Direct point callup displays individual points alphabetically and then homes in on the logical choice as more point information is entered
- A Site Plan bitmap can be displayed for reference; icons can be added to indicate system status
- Up to 50 custom point detail messages can be generated
- Date formats are either MM/DD/YY or DD/MM/YY
- Time formats are either 24 hour or 12 hour with AM/PM
- System Normal screen supports a gray scale bitmap (watermark) for location name, company logo, or site plan

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

Site Plan with Event Icons

Site Plan Bitmap. The InfoAlarm Command Center supports a site plan monochrome bitmap image (size is 281 pixels wide by 192 pixels high) that can also display icons indicating activity and location. Shown to the right is a sample site plan with icons shown in each building area. For this example, each area is showing an "A" for an initiating device in alarm, a "WF" for waterflow occurring, and an icon indicating notification appliances in alarm. (Icons can be created for site specific symbology, these are for example only.)

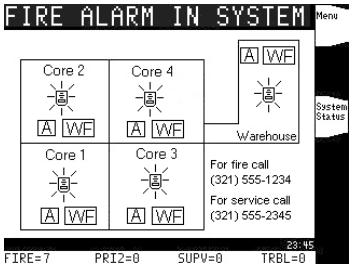

Figure 3: Site Plan

Site Plan Selection and Detail. If desired, the site plan can be the primary display screen for system activity or can be for reference, available by selecting the "Site" softkey. Depending on the facility layout, the site plan can also be a convenient location for common reference information such as primary call phone numbers, street address, etc. to assist operators in their assigned response.

System Normal Screen. The site plan (or another bitmap image) can be displayed on the System Normal screen as a grey image watermark behind the screen text. (Size and type are the same as that for a site plan bitmap). This can be used to identify the specific location of the 4100ES or can display a site-specific logo or other information.

Information Review

The Trouble Log History screen shown to the right identifies the ability to view multiple event entries with minimal scrolling. For specific information access, pressing "Next" or "Previous" on the keypad highlights the selected next or previous item in the list as indicated by the arrow and the bolded first line of Entry 6 (See Figure 4.

For access to the next or previous full screen of information, use the Page Dn or Page Up keys located to the right of the soft keys, each to the right of the display.

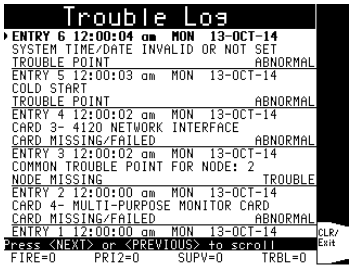

Figure 4: Trouble Log

Customized Emphasis

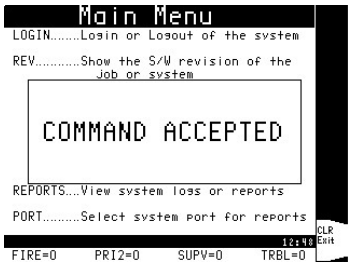

Figure 5: Main Menu

The Main Menu screen illustration to the left demonstrates how print/display statements appear for status information or for prompting of user input. Other examples of this format occur when setting time and date, entering a password, or identification of a status change such as point enabling or disabling. Use of this feature allows the display to clearly focus the user on required information or actions.

Additional Primary Display Screens

Below are samples of a First and Most Recent primary display and of a General Alarm display.

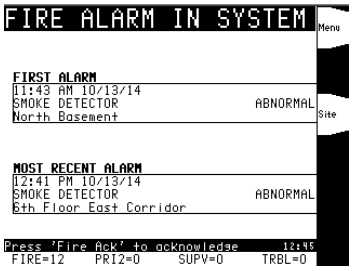

Figure 6: First and Most Recent Primary Display Option

Figure 7: General Alarm Primary Display Option

Control Panel Operation Reference

Note: Detailed operator instructions are on document 579-685AC.

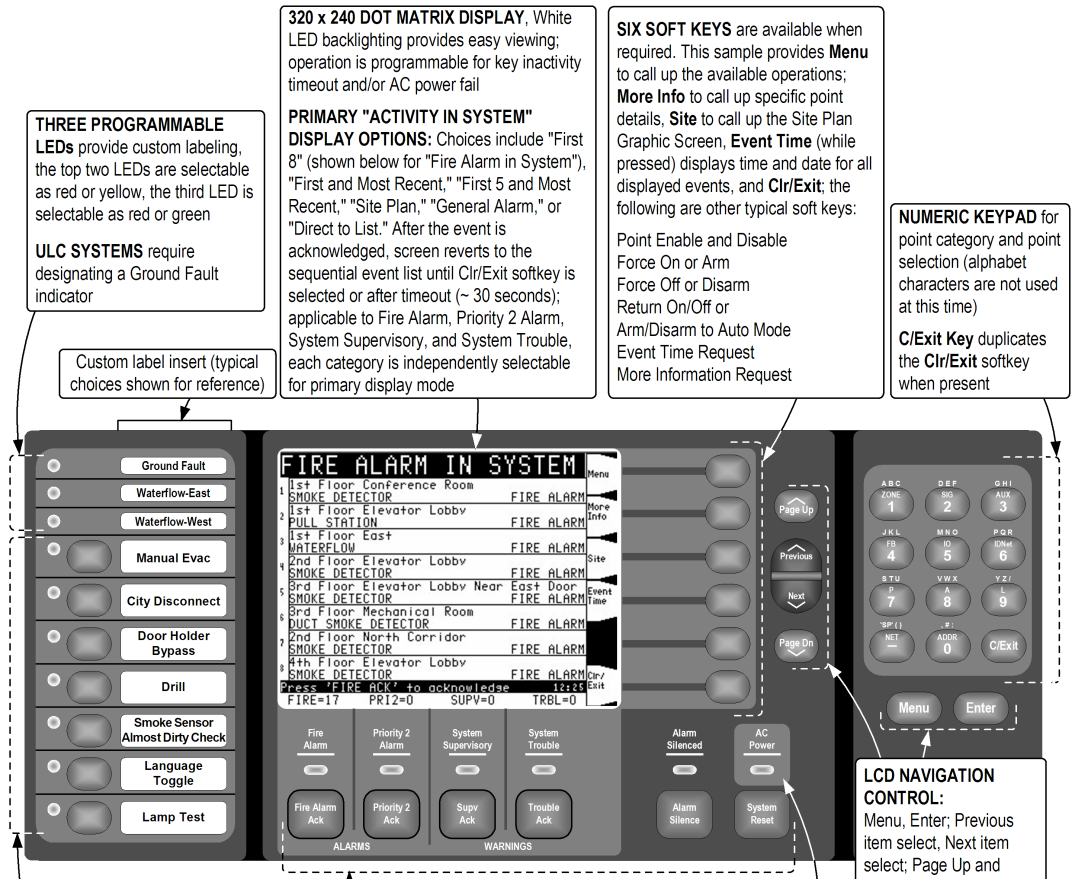

Figure 8: Control Panel Operation Reference

Display Feature Reference (shown actual size)

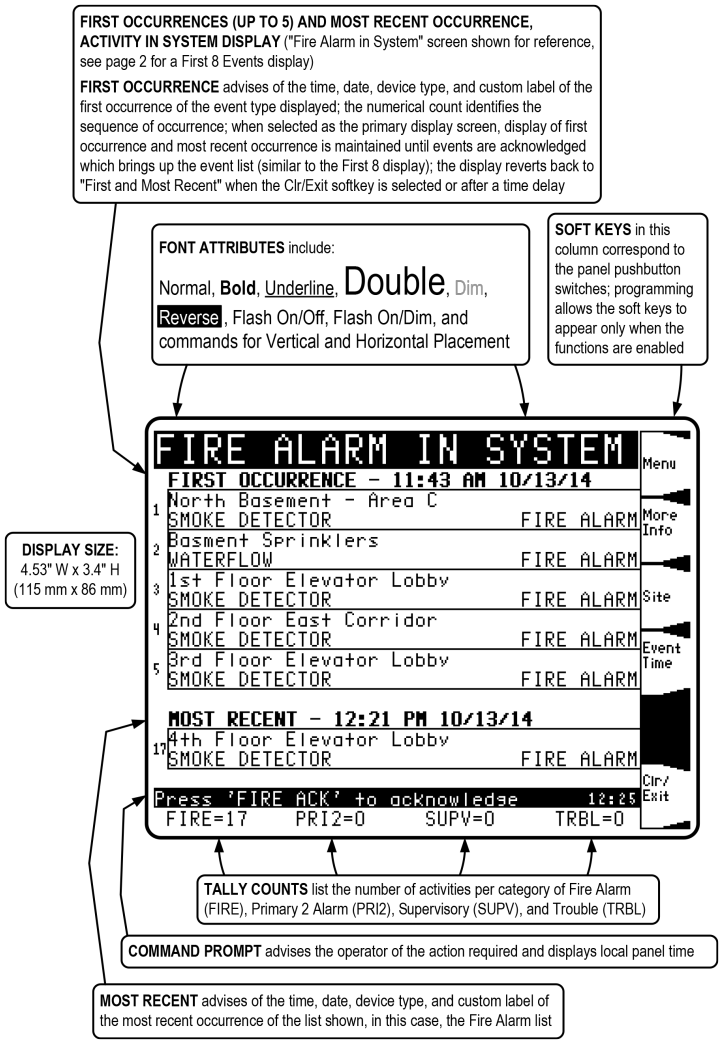

Figure 9: Display Feature Reference

International Display Details

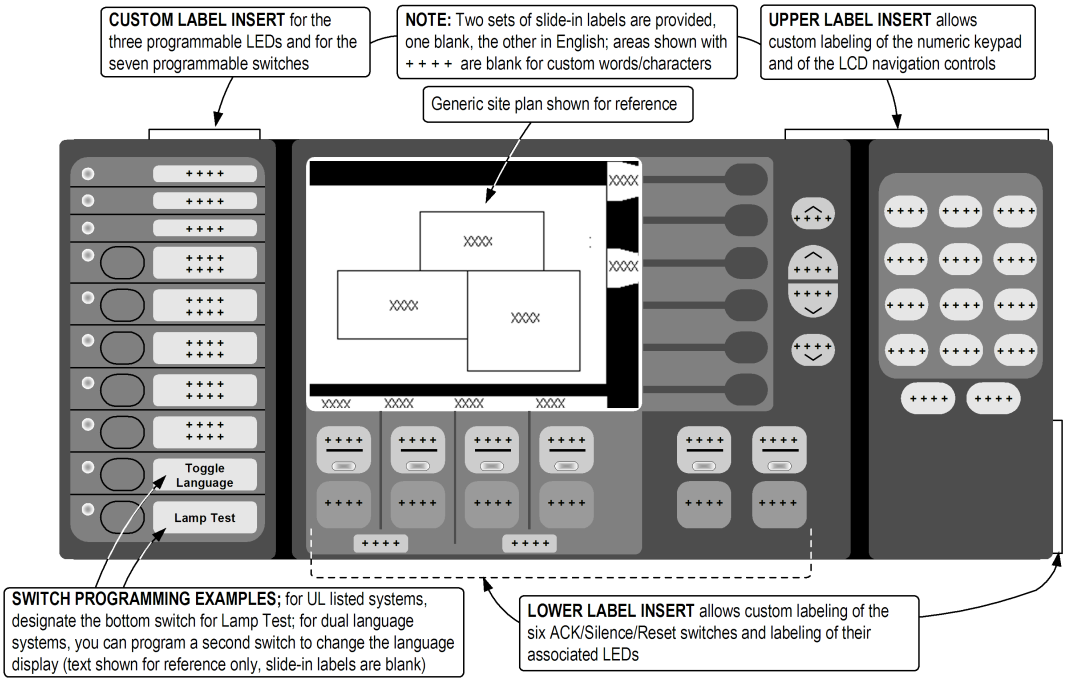

Figure 10: International Display Details

Remote InfoAlarm Command Center Front View

Figure 11: Remote InfoAlarm Command Center Front View

Remote InfoAlarm Command Center Mounting Reference

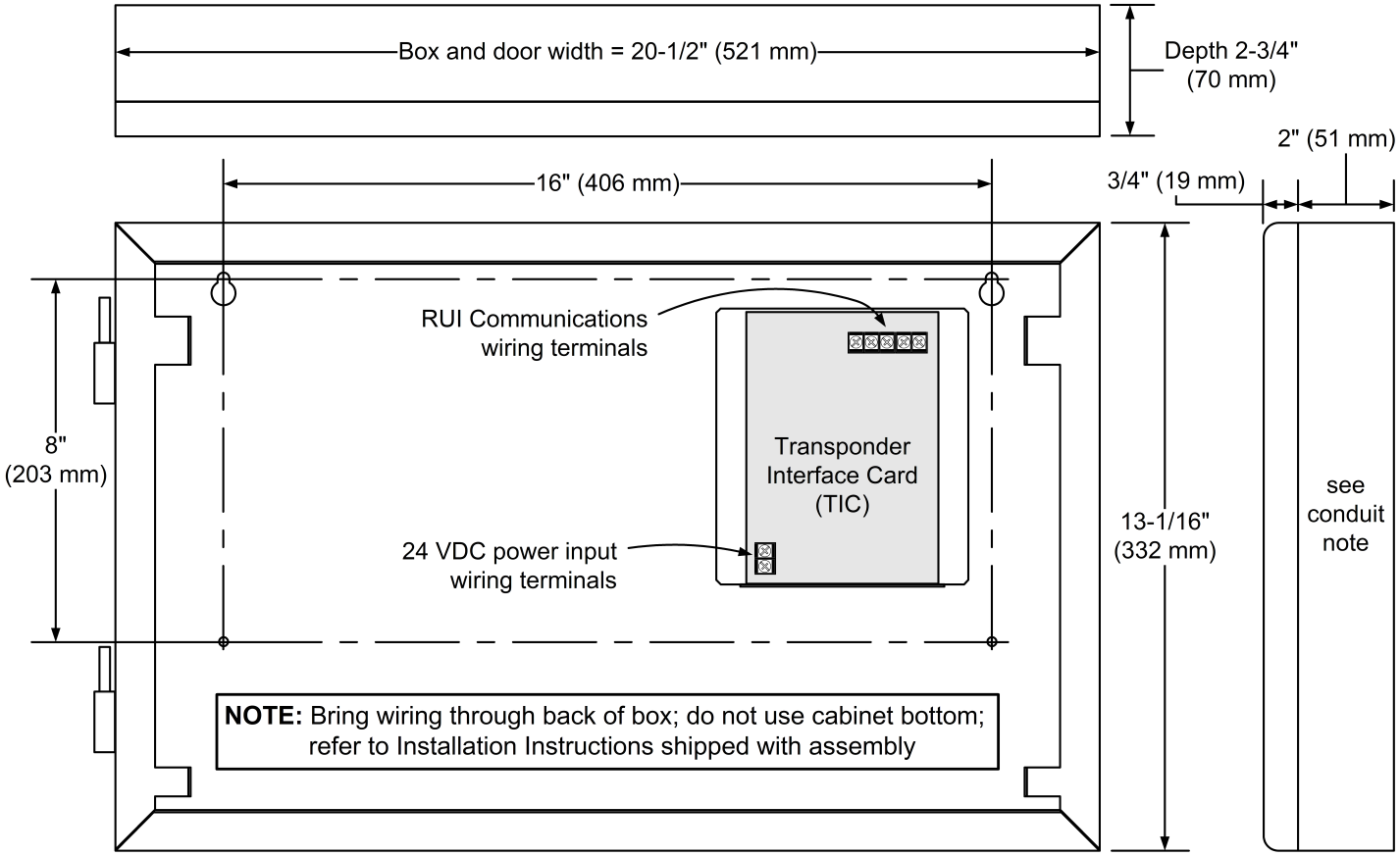

Figure 12: Remote InfoAlarm Command Center Mounting Reference

Additional Data Sheet Reference

Table 1: Additional Data Sheet Reference

Data Sheet	Subject
AC4100-0031	Standard Panel Reference
AC4100-0036	Network Display Unit
AC4100-0038	Remote Annunciators
AC4100-0035	MINIPLEX Transponders
AC4081-0002	Remote Battery Charger
AC4100-0034	Audio/Phone Modules
AC4100-0032	LED/Switch Modules
AC4100-0037	Enclosure Options

Product Selection

Table 2: 4100ES Master Controller with InfoAlarm Command Center (see data sheet for descriptions of the 4100ES Basic Control Panel details, standard product features, options, and reference for related fire alarm control panel products)

SKU	SKU Type	UL	ULC	Voltage	InfoAlarm Command Center Type	Master Controller Features
A100-9114	English	Yes	—	120 VAC, 60 Hz	**Master Controller Assembly**; raised keys with fixed labels	9 A system power supply/battery charger (SPS), 250 point IDNet interface, 3 NACs, auxiliary relay, and external RUI communications interface
A100-9212	International	Yes	—	220/240 VAC, 50/60 Hz	**Master Controller Assembly**; flat keys with inserts for custom key labels	9 A system power supply/battery charger (SPS), 250 point IDNet interface, 3 NACs, auxiliary relay, and external RUI communications interface
A100-9122	English	Yes	—	120 VAC, 60 Hz	**Redundant CPU** (Master Controller); raised keys with fixed labels	One Command Center with redundant CPU cards and SPS power supplies in a two bay assembly. Active SPS battery charger in Bay 1 only. External RUI connections require A100-1291 RUI expansion modules. **Do not use circuit connections on primary and secondary SPS power supplies.**
A100-9222	International	Yes	—	220/240 VAC, 50/60 Hz	**Redundant CPU** (Master Controller); flat keys with inserts for custom key labels	

Table 3: Upgrade Kits (see NOTE for NDU upgrades; Upgrade kit are UL and ULC listed)

SKU	SKU Type	Description	NOTE
A100-7153	English	**Upgrade Kit for existing 4100ES or 4100U Series Fire Alarm Control Panels**; includes complete bay front assembly with InfoAlarm Command Center providing raised keys with fixed labels; uses existing power supply and Master Controller Board (CPU card)	NDU upgrades require A100-0640 Display Memory Expansion, see below for details
A100-7155	International	**Upgrade Kit for existing 4100ES or 4100U Series Fire Alarm Control Panels**; includes complete bay front assembly with InfoAlarm Command Center providing flat keys with inserts for custom key labels; use for non-English language applications including French for Canada; uses existing power supply and Master Controller Board (CPU card)	A100-0640 Display Memory Expansion, see below for details

Table 4: Network Display Unit (NDU) Master Controller with InfoAlarm Command Center (NOTE: See data sheet AC4100-0036 for NDU feature details and for details on SPS NAC ratings for NDU with VCC)

SKU	SKU Type	UL	ULC	Voltage	NDU Type	Master Controller Features
A100-9151	English	Yes	—	120 VAC, 60 Hz	**NDU (Standard, Non-Voice)**; raised keys with fixed labels	**Includes**: A100-0640 InfoAlarm Memory Expansion, Network Interface Module (select media cards separately), 9 A SPS power supply/batt. charger, and external RUI; (**NOTE**: SPS IDNet channel and NACs are disabled)
A100-9243	International	Yes	—	220/240 VAC, 50/60 Hz	**NDU (Standard, Non-Voice)**; flat keys with inserts for custom key labels	**Includes**: A100-0640 InfoAlarm Memory Expansion, Network Interface Module (select media cards separately), 9 A SPS power supply/batt. charger, and external RUI; (NOTE: SPS IDNet channel and NACs are disabled)
A100-9152	English	Yes	—	120 VAC, 60 Hz	**NDU with Voice Interface and Control**; raised keys with fixed labels	**Includes above features and adds**: VCC Bay with Standard CPU Module, Network Interface Module (select media cards separately), 9 A SPS with 250 Point IDNet Interface, (3) 3 A NACs, and ext. RUI comm. interface
A100-9244	International	Yes	—	220/240 VAC, 50/60 Hz	**NDU with Voice Interface and Control**; flat keys with inserts for custom key labels	**Includes above features and adds**: VCC Bay with Standard CPU Module, Network Interface Module (select media cards separately), 9 A SPS with 250 Point IDNet Interface, (3) 3 A NACs, and ext. RUI comm. interface

Table 5: Remote Annunciator with InfoAlarm Command Center (see data sheet *AC4100-0038* for Remote Annunciator features)

SKU	SKU Type	UL	ULC	InfoAlarm Command Center Type		Master Controller Features
A100-9612	English	Yes	Yes	With raised keys and fixed labels	**Basic Remote Annunciator**	Includes Expansion Bay with PDI, Remote TIC module; power is supplied from host control panel
A100-9614	International	Yes	—	With flat keys & inserts for custom key labels	**Basic Remote Annunciator**	Includes Expansion Bay with PDI, Remote TIC module; power is supplied from host control panel
A100-9607	English	Yes	Yes	With raised keys and fixed labels	**Remote Annunciator**	Includes Expansion Bay with PDI, Remote TIC module; power supply is specified separately when configured
A100-9609	International	Yes	—	With flat keys & inserts for custom key labels	**Remote Annunciator**	Includes Expansion Bay with PDI, Remote TIC module; power supply is specified separately when configured

Table 6: InfoAlarm Command Center Memory Option (may be required to be ordered separately, see description details)

SKU	Description
A100-0640	**Display Memory Expansion Module**; included with NDU systems; required for all InfoAlarm Command Centers connected to a panel if any are using 2 byte character fonts; 6 Meg module mounts on rear of display board

Table 7: Remote InfoAlarm Command Center Control Assembly with Cabinet for Surface Mounting

SKU Number/Cabinet Color		Application Type	Listing	Description
Red	Platinum			
A100-9441	A100-9443	International	UL	**Remote InfoAlarm Command Center with cabinet**; for surface mounting; includes mounting box and door assembly with glass insert; uses RUI communications; requires external 24 VDC system voltage; see illustrations below and Installation Instructions 579-687AC for details
A100-9401	A100-9403	English	UL & ULC	

Specifications

Table 8: General Display Specifications

Specification		Rating
Size Reference	Dot Matrix Size	320 x 240
	Active Display Area	4.53" W x 3.4" H (115 mm x 86 mm), includes header, footer, and softkey area; 5.66" diagonal measurement (144 mm)
	Characters	Up to 854 characters total using standard ASCII character font
	Designation	QVGA; one quarter of standard VGA (Video Graphics Array) display
Display Polarizer Type		Transflective with rear backlight
Display Adjustment		Contrast adjustment is located on the controller module
Backlight		White LEDs with intensity adjustment and selectable AC power fail operation; intensity adjustment is located on the controller module
Backlighting Operation Options		On continuously; Off with AC power fail until a switch is pushed; selectable timeout without switch activity

Table 9: Control Panel Mounted InfoAlarm Command Center Current Requirements

Specification		Rating	
Master Controllers (A100-9114, A100-9212, A100-9222)	Supervisory	445 mA @ 24 VDC	Panel currents only are shown, add external device loading per system requirements
	Alarm	540 mA @ 24 VDC; backlight and tone-alert on	
Redundant CPUs (A100-9122, A100-9222)	Supervisory	636 mA @ 24 VDC	
	Alarm	818 mA @ 24 VDC; backlight and tone-alert on	
Network Display Units, Non-Voice (A100-9151, A100-9243)	Supervisory	491 mA @ 24 VDC	
	Alarm	546 mA @ 24 VDC; backlight and tone-alert on	
Network Display Units, Voice (A100-9152, A100-9244)	Supervisory	900 mA @ 24 VDC	
	Alarm	1.017 A @ 24 VDC; backlight and tone-alert on	
Upgrade Kits	A100-7153 & A100-7155 for 4100U	add 82 mA supervisory; add 127 mA for alarm	

Table 10: Remote Annunciators with InfoAlarm Command Center, Powered from Control Panel

Specification			Rating
Voltage			19 to 33 VDC (24 VDC nominal), system supplied; requires separate wiring
Current		Supervisory	169 mA @ 24 VDC
		Alarm	202 mA @ 24 VDC; backlight and tone-alert on
Mounting Details; Stand-Alone Cabinet Models			See page 6 for reference illustration
4100ES Capacity, RUI Output	Type		RUI (Remote Unit Interface) external annunciator communications line SLC (signaling line circuit); Class B or Class A operation
	Capacity		Up to 31 total remote RUI devices, including up to 10 InfoAlarm Command Center devices
	RUI Device Reference List		4100ES: InfoAlarm Command Center, Remote Annunciators, MINIPLEX Transponders; A4603-9101 LCD Annunciator, A602-9101 Status Command Unit (SCU), and A602-9102 Remote Command Unit (RCU); refer to data sheet ***AC4100-0031*** for additional 4100ES RUI information
Wiring Requirements		Data	Single twisted, shielded pair, 18 AWG (0.82 mm^2)
		Power	18 to 12 AWG (0.82 mm^2 to 3.31 mm^2) wires for 24 VDC system power
		Earth	A dedicated earth ground connection to the electrical box is required for proper ESD and EMI protection; wire in accordance with NFPA 70 (***National Electrical Code***) Article 250

Table 11: Custom Point Detail Messages

Item		Description
Message Location Details		Typical messages might include contact details and other contact or reference information
Number of Messages		Up to 50
Message Size	Character Details	120 characters; visible characters = 116; (lines 1 and 2 require one carriage return character and one line feed character)
	Line Details	3 lines total; 40 characters maximum per line; line 3 may be limited to 36 visible characters depending on characters in lines 1 and 2
Environmental		Operating Temperature - 32° to 120°F (0° to 49° C)
		Operating Humidity- Up to 93% RH, non-condensing @ 90° F (32° C) maximum

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