



ONYX™ Series
ACS Series Annunciators
ACM/AEM-24AT, ACM/AEM-48A
Section: Annunciator Control Systems

General

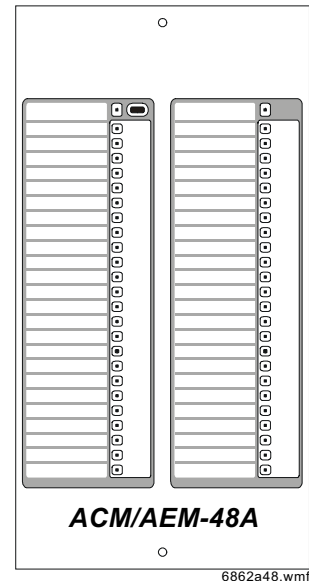
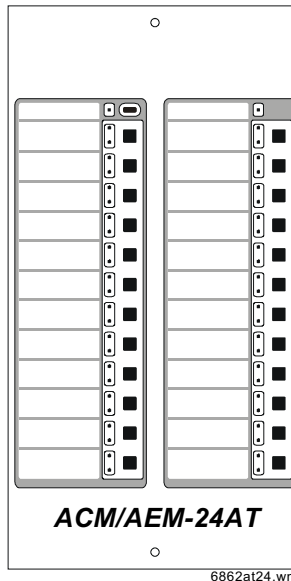
The ONYX™ Series ACS Annunciators provide a modular line of products for annunciation and control of the NOTIFIER ONYX™ Series NFS-640 Intelligent Fire Alarm Control Panel and NCA Network Control Annunciator, as well as NOTIFIER's AM2020, AFP1010, AFP-400, AFP-300, and AFP-200 fire control panels. The ACS line provides arrays of LEDs to indicate point status and, in some versions, switches to control the state of output circuits. These ACS units use a serial interface and may be located at distances of up to 6,000 feet (1,828.8 meters) from the panel.

Features

- Speaker control mode for use with XPIQ and the following panels: NFS-640, AM2020, AFP1010, AFC-600, AFP-400, AFP-300. Enables the ACS to control operation of groups of multi-channels mapped to groups of multi-speakers.
• Compatible with existing annunciators.
• Color-programmable LEDs.
• On-board end-of-line resistors can be enabled/disabled by setting a switch.
• Alarm/Circuit On and Trouble LED per-point option or more dense Alarm-only option.
• Touch-pad control switch option for remote control of system relays; or silence, reset, and evacuate.
• LEDs may be programmed to display status of indicating circuits or control relays as well as system status conditions.
• Fan Control (manual/automatic) option for the AM2020 and AFP1010.
• System Trouble LED indicator.
• On-Line/Power LED indicator.
• Alarm and trouble resound with flash of new conditions.
• Local sounder for both alarm and trouble conditions with silence/acknowledge button (program options).
• Serial EIA-485 interface for reduced installation cost.
• May be powered by 24 VDC from the panel or by remote power supplies.
• Efficient switched-power converter reduces power consumption.
• Microprocessor-controlled electronics, fully supervised.
• Slip-in custom labels, lettered with standard typewriter or LabelEase program.
• Plug-in terminal blocks for ease of installation and service.
• Trouble monitor option for remote power supplies.

Construction

The ACS modules are provided in two basic controller modules, each with its expander module. The ACM-24AT provides 24 annunciation and control points per module, each with a red, green, or yellow Alarm/Circuit On LED, a yellow Trouble LED, and a touch-key switch. The ACM-48A provides 48 annunciation points per module, each with a red, green, or yellow Alarm/Circuit On LED (for annunciat-



ing control relays, the LED indicates ON/OFF).

On the ACM-24AT, each LED point is individually color-programmable. On ACM-48A, each column of 24 LED points can be color-configured using a DIP switch.

Applications

The ACS Series provides arrays of LEDs to indicate point status and, in some versions, switches to control the state of output circuits.

Installation

The ACS Series annunciator and control subsystems use modular hardware assemblies which allow the custom configuration of the annunciator panel to fit the individual job requirements.

Standard backboxes and mounting hardware schemes, including special remote cabinets, allow the annunciators to be constructed and configured with other NOTIFIER system components.

When used with the NFS-640, AM2020, AFP1010, AFP-400, or AFP-300, the ACS modules are used for manual selec-

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This document is not intended to be used for installation purposes. We try to keep our product information up-to-date and accurate. We cannot cover all specific applications or anticipate all requirements. All specifications are subject to change without notice. For more information, contact NOTIFIER. Phone: (203) 484-7161 FAX: (203) 484-7118



tion of speaker and telephone circuits. In this application, they are typically mounted in the main control near the microphone and telephone handset.

For remote annunciation applications, the modules are typically mounted in special ABF or ABS boxes. Control switch key locks (AKS-1/-1B) and phone jacks (APJ-1/-1B) are available.

Communication between the ACS Series annunciators and the host Fire Alarm Control Panel is made through an EIA-485 multi-drop loop, eliminating the need for costly wiring schemes. Four wires are required, two for the EIA-485 communications (twisted pair), and two for 24 VDC regulated power.

Retrofit of ACS Series annunciators into existing systems is easily accomplished. Software may require upgrading, and the AM2020 or AFP1010 must include a SIB-2048(A)/SIB-NET Serial Interface Board.

All field-wiring terminations use removable, compression-type terminal blocks for ease of installation, wiring, and circuit testing.

Operation

The ACS Series annunciator and control system provides the NOTIFIER system with up to 32 remote serially connected annunciators, each with a capacity of 96 points, for a total capacity of **3072 points** (subject to the capability of the FACP). The NCA is capable of using the full 96 points.

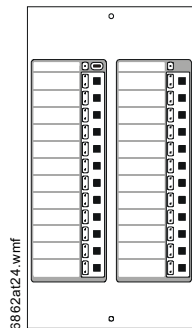
Local or remote power supplies and serial communications allow the ACS to be located virtually anywhere in the protected premises.

AM2020, AFP1010, NFS-640 and NCA system alarm and/or trouble conditions may be annunciated on a per-point basis, or in a grouped or zone configuration.

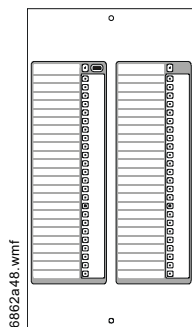
Control of system operational controls, such as Signal Silence, System Reset, and local annunciation controls (such as Local Acknowledge and Lamp Test) may be accomplished through the module's rubber keypad.

Product Line Information

ACM-24AT: The Annunciator Control Module-24AT contains 24 color-programmable (red/green/yellow) Active and 24 yellow Trouble LEDs, 24 momentary touch-pad switches, a System Trouble LED, an On-Line/Power LED, and a local piezo sounder with a silence/acknowledge switch for audible indication of alarm and trouble conditions. Includes instructions. 8-3/8" (21.27 cm) high; 4-3/8" (11.11 cm) wide.



AEM-24AT: The Annunciator Expander Module-24AT expands the ACM-24AT by 24 system points. The AEM-24AT is identical in size and in frontal appearance to the ACM-24AT. Up to three of these expander modules can be supported by an ACM-24AT, for a maximum of 96 system points. 8-3/8" (21.27 cm) high; 4-3/8" (11.11 cm) wide. **NOTE:** The AEM-24AT **cannot** be used to expand the ACM-48A.



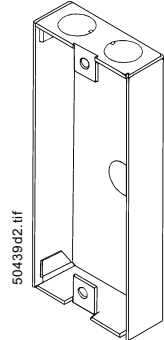
ACM-48A: The Annunciator Control Module-48A contains 48 color-programmable (red/green/yellow) Active LEDs, a System Trouble LED, an On-Line/Power LED, and a local piezo sounder with a Silence/Acknowledge switch for audible indication of alarm and trouble conditions. Includes in-

structions. 8-3/8" (21.27 cm) high; 4-3/8" (11.11 cm) wide.

AEM-48A: The Annunciator Expander Module-48A expands the ACM-48A by 48 system points. The AEM-48A is identical in frontal appearance to the ACM-48A. One expander module can be supported by an ACM-48A, providing a maximum of 96 points (subject to the capability of the FACP). 8-3/8" (21.27 cm) high; 4-3/8" (11.11 cm) wide.

NOTE: The AEM-48A **cannot** be used to expand the ACM-24AT.

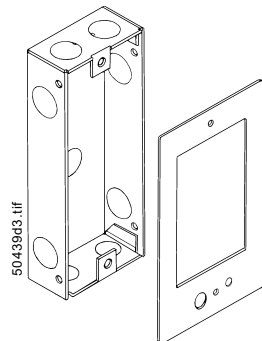
ABS-1B: (shown at right) The Annunciator Surface Box-1B (black) provides for the remote mounting of one annunciator module in a surface-mount enclosure. Knockouts are provided for use with 1/2" conduit. The annunciator mounts directly to the ABS-1B without a dress plate. 8-1/2" (21.59 cm) high x 4-1/2" (11.43 cm) wide x 2" (5.08 cm) deep. **NOTE:** The ABS-1B will not support the installation of the AKS-1B Annunciator Key Switch.



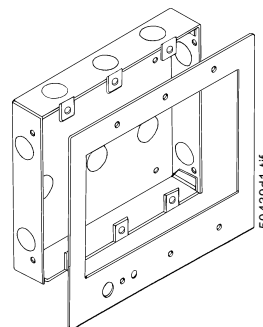
ABS-1TB: The ABS-1TB is an attractive surface-mount backbox for mounting one ACS Series Annunciator. Unlike the ABS-1B, the ABS-1TB has an increased depth that allows mounting of the APJ-1B Annunciator Phone Jack and AKS-1B Annunciator Key Switch. Black, 9-15/16" (25.24 cm) high x 4-5/8" (11.75 cm) wide x 3" (7.62 cm) deep.

ABS-2B: The Annunciator Surface Box-2B (black) provides for the surface mounting of one ACM-24AT/AEM-24AT combination or one ACM-48A/AEM-48A combination. Knockouts are provided for use with 1/2" conduit. The annunciators mount directly to the ABS-2B without a dress plate. 8-1/2" (21.59 cm) high x 8-15/16" (22.7 cm) wide x 2" (5.08 cm) deep. **NOTE:** The ABS-2B will not support the installation of the AKS-1B Annunciator Key Switch.

ABF-1B: (shown at right) The Annunciator Flush Box-1B (black) provides for the remote mounting of a single annunciator module in a flush-mount enclosure. Knockouts are provided for use with 1/2" conduit. The ABF-1B includes a painted black metal trim plate [11" (27.94 cm) high x 6-1/4" (15.875 cm) wide], mounting hardware, and an adhesive-backed annunciator label for the dress plate. 9-15/16" (25.24 cm) high x 4-5/8" (11.75 cm) wide x 2-1/2" (6.35 cm) deep.



ABF-2B: The Annunciator Flush Box-2B (black) provides for the flush mounting of two annunciator modules. Includes a painted black metal trim plate [11" (27.94 cm) high x 10-5/8" (26.99 cm) wide] and adhesive-backed annunciator label. 8-1/2" (21.59 cm) high x 8-15/16" (22.7 cm) wide x 3.75" (9.525 cm) deep.



ABF-4B: (shown at left) The Annunciator Flush Box-4B (black) provides for the remote mounting of one to four annunciator modules. Knockouts are provided for use with 1/2" conduit. The flush-mounted ABF-4B includes a painted black metal trim plate [11" (27.94 cm) high x 19-3/8" (49.21 cm) wide] and an annunciator label. 9-15/16" (25.24 cm) high x 17-3/8" (44.13 cm) wide x 2-1/2" (6.35 cm) deep.

ABF-1DB/ABF-2DB/ABS-4D: The ABF-1DB, ABF-2DB and ABS-4D are semi-flush-mount backboxes for NOTIFIER ACS Series Annunciators. The ABF-1DB mounts one annunciator module and the ABF-2DB mounts two modules or an NCA. The ABS-4D mounts up to four annunciators *or* two annunciators with an NCA. Black with an attractive smoked glass door with NOTIFIER keylock. The ABS-4D is hinged on the bottom for stability.

DIMENSIONS, ABF-1DB: Box only: 9-15/16" (25.24 cm) high x 4-5/8" (11.75 cm) wide x 2-1/2" (6.35 cm) deep.

Door: 10.713" (27.21 cm) high x 6" (15.24 cm) wide x 0.75" (1.9 cm) deep.

DIMENSIONS, ABF-2DB: Box only: 9-15/16" (25.24 cm) high x 9-3/16" (23.34 cm) wide x 3" (7.62 cm) deep.

Door: 10.713" (27.21 cm) high x 10.375" (26.35 cm) wide x 0.75" (1.9 cm) deep.

DIMENSIONS, ABS-4D: Box only: 11.97" (30.40 cm) high x 19.87" (50.47cm) wide x 3.50" (8.89 cm) deep.

Door: 11.97" (30.40 cm) high x 19.87" (50.47 cm) wide x 1.25" (3.18 cm) deep.

ADP-4B: The Annunciator Dress Panel-4B (black) provides for the cabinet mounting of one to four modules. The ADP-4B hinge-mounts to a CAB-4 Series cabinet. Modules mount directly to threaded studs on the ADP-4B.

DP-DISP: The Dress Panel-Display provides for the cabinet mounting of one to four modules in the *top row* of a CAB-4 Series backbox. Modules mount directly to threaded studs on the DP-DISP (see illustration below).

BMP-1: Annunciator Blank Module is a flat black dress plate that covers unused module positions in the annunciator backbox or in the ADP-4B. 8-3/8" (21.27 cm) high x 4-3/8" (11.11 cm) wide. Studs for a variety of module mounting options are available.

AKS-1B: The Annunciator Key Switch-1B (black) provides access security for the control switches on the ACM/AEM-24AT. The key switch kit includes a key and hardware for mounting to the ABF-1B. Also included is an adhesive-backed annunciator label for use with the key switch/dress plate assembly. **NOTE:** The **AKS-1B** can *only* be employed with the **ABS-1TB**.

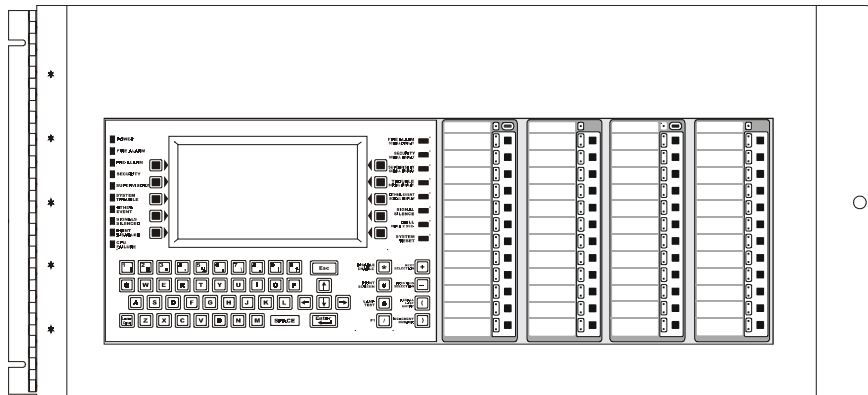
APJ-1B: Annunciator Phone Jack- 1B (black) for Fire Fighters Telephone (**FFT-7**). Includes mounting hardware and adhesive-backed label.

Agency Listings and Approvals

See the first page of this data sheet for listing agencies and file numbers. These listings and approvals apply to the ACM/AEM-24AT and the ACM/AEM-48A. In some cases, certain modules or applications may not be listed by certain approval agencies, or listing may be in process. Consult factory for latest listing status.

Architectural/Engineering Specifications

For specifications on ACS Series Annunciation & Control Systems, contact **NOTIFIER**.



DP-DISP Dress Panel with NCA Network Control Annunciator in left two positions, and two ACM-24AT Annunciators at right.