Advanced

Axis AX

Modular Command Center

The Axis AX Series Modular Command Centers from Advanced have been designed to support a wide variety of applications. The Modular Command Centers are fully compatible with the Axis AX Series Intelligent Fire Alarm Control Panels and the Axis AX “V” Series Intelligent Fire Alarm Control Panels with Integrated Audio.

In order to simplify installation, programming, troubleshooting, training and support, all of the Axis AX Series Fire Panels & Modular Command Centers can be programmed using the same Windows™ based programming tools. In addition, a “family” consisting of all of the Axis AX Series main PCBs, option modules, peripherals and intelligent devices are fully compatible across the full range of Axis AX Series Fire Panel & Modular Command Center products.

In order to simplify control and operation of a large, networked, wide area or high rise system, each Modular Command Center will support up to 252 individually assignable switches through use of up to sixteen CAX-ASW-16, Switch LED Modules. These modules mount to the inner doors of the Modular Command Centers. The switch action may be either toggle, on/off or hold for 2 seconds. Each switch is associated with 3 LEDs that are red, yellow and green. These LEDs are fully programmable and can be set to turn on steady and or to flash. A large area is made available per switch LED for user defined text that may clearly identify the intended function. With such versatility, operation and control is simplified, status is readily available and quickly identified.

Examples of switch operations include: fan and HVAC control, paging area select, message select, purging, zone/area/point bypass, etc. The total number of switches supported across a maximum configured network is 51,200. A key feature is that individual switch and LED response time is not affected by the size of the network and each switch and LED can be assigned to network functions as well as individual panel functions.

A CAV-AMP-80, Audio Amplifier Module, with associated CAX-PSU-6 Power Supply/Charger and CAV-MIC, Microphone Assembly installed in a Modular Command Center adds audio capability at the head end of a fi re system. Each CAV-AMP-80 has two 40 Watt speaker circuits (may be programmed as 1:1 Backup) and can play up to 16 different messages, allowing for easy adaptation to mass notifi cation requirements. Through either manual or automatic controls, live or recorded audio messages can be sent to any location in a facility.



Features

- 1, 2 and 4 Loop Command Centres
- Mass Notification Functionality
- Audio/Visual Synchronization (Panel & network wide)
- Two Standard Sizes (3x3 and 3x5)
- Up to 200 Networked Panels
- Multiple Command Center Control Options

Listings and Approvals

- ETL ANSI/UL 864 Listed: 101564744NYM-001
- CSFM Approved: 7165-1713:0101
- NYCFD COA #6105

Control functions include: All Call, All Evac, All Alert, Message Select and Area Select. For instant control of paging to all areas, press the All Call button. To generate and play an Evacuation, Alert or Mass Notifi cation message throughout a facility press the All Evac, All Alert or Message button. To play a specific message in specific areas, use individual message selection buttons followed by the individual area selection buttons.

A typical high rise application may be configured with Advanced CAV-VB Audio Booster's on a per floor (area) basis. The boosters are controlled by the Control-by-Event logic at the Command Center to generate specific messages upon specific conditions. It is easy to program for example a typical fire floor, floor above and floor below evacuate message simultaneously with adjacent floor alert messages, while also simultaneously providing the capability to override automatic messages at any time with manual paging to all or selective areas. While providing all of this power and flexibility the audio and visual signals maintain full synchronization when required to.

The Modular Command Centers are available in two basic enclosure sizes. The smaller of the two enclosures (also referred to as 3x3 modular command center) measures 22.6"H x 20.3"W x 5.5"D. The larger of the two enclosures (also referred to as 3x5 modular command center) measures 35.9"H x 20.3"W x 5.5"D. The enclosures may be either surface or flush mounted.

Selecting the right components to create a customized Modular Command Center is straightforward. Follow steps 1-6 below.

Step One: Enclosure Selection - Small Enclosure

Backbox – CCM-01-BB. Dimensions: 22.6"H x 20.3"W x 5.5"D

Provides 3x3 module support. May be surface or flush mounted. Supports one AxisAX Series main PCB (base card), one expandable CAX-PSU power supply, one CAV-AMP-80 Amplifier, one CAX-PSU-6 Power Supply Charger, or one of either CAX-RL4 or CAX-RL8 Relay Module or CAX-MDM Modem Module and one D9068P Communicator.Inner Door Options – CCM-01-ID1, CCM-01-ID2, CCM-01-ID3.

C-CCM-01-ID1: 1 double aperture and 7 single aperture openings. Attaches to C-CCM-01-BB back box. Has 1 double aperture, which supports mounting of CAX-DSP (FRCAX-DSP) Display/Keyboard Module or CAX-DAP blank plate, and 7 single aperture openings. Single aperture openings support: CAX-SAP, CAX-I/O-48, CAX-ASW-16, CAX-012 and CAV-MIC modules. Metalwork and mounting hardware only.

C-CCM-01-ID3: 9 Single aperture openings. Attaches to C-CCM- 01-BB back box. Has 9 single aperture openings. Single aperture openings support: CAX-SAP, CAX-I/O-48, CAX-ASW-16, CAX- 012 and CAV-MIC modules. Metalwork and mounting hardware only.

Outer Door – CCM-01-OD: Attaches to C-CCM-01-BB back box. Metalwork, plexiglass, key lock and mounting hardware only.

Step One: Enclosure Selection - Large Enclosure





Backbox – CCM-02-BB. Dimensions: 35.9”H X 20.3”W X 5.5”D

Provides 3x5 module support. May be surface or flush mounted. Supports one AxisAX Series main PCB (base card), one expandable CAX-PSU power supply, two CAV-AMP-80 Amplifi ers, two CAXPSU-6 Power Supply Chargers, one of either CAX-RL4 or CAXRL8 Relay Modules or CAX-MDM Modem Module and one D9068P Communicator.Inner Door Options – CCM-02-ID1, CCM-02-ID2, CCM-02-ID3

C-CCM-02-ID1: 1 double aperture and 13 single aperture openings. Attaches to C-CCM-02-BB back box. Has 1 double aperture opening, which supports mounting of CAX-DSP (FRCAX-DSP) Display/Keyboard Module or CAX-DAP blank plate, and 13 single aperture openings. Single aperture openings support: CAX-SAP, CAX-I/O-48, CAX-ASW-16, CAX-012 and CAV-MIC modules. Metalwork and mounting hardware only.

C-CCM-02-ID3: 15 Single aperture openings. Attaches to C-CCM- 02-BB back box. Has 15 single aperture openings. Single aperture openings support: CAX-SAP, CAX-I/O-48, CAX-ASW-16, CAX-012 and CAV-MIC modules. Metalwork and mounting hardware only. Outer Door – C-CCM-02-OD Attaches to C-CCM-02-BB back box. Metalwork, plexiglass, key lock and mounting hardware only.

Outer Door

Outer Door – C-CCM-02-OD Attaches to C-CCM-02-BB back box. Metalwork, plexiglass, key lock and mounting hardware only.

Step 2: Main PCB's

Standard System Modules, select one each:

- CAX-ACB: AC input power interface PCB. Required for CAX-CTL-1PCB and CAX-CTL-2PCB
- CAX-DSP: AX Series Display/Keyboard PCB. Comes with mounting plate, membrane switch, cables and mounting hardware.

System Base Card, select one of the following:

- CAX-CTL-1PCB (Base Card): Single Loop Control Board with internal PSU. Cannot expand system power with CAX-PSU.
- AX-CTL-2PCB (Base Card): Two Loop Control Board with internal PSU.
- Optional expansion power supply for CAX-CTL-2PCB: Add CAX-PSU Expansion Power Supply Module, 5.0A @ 24VDC, filtered and regulated, if required.

SLC and/or NAC Expansion for CAX-CTL-2PCB (Base Card) ONLY, select one of the following:

- CAX-LPD: Includes 2 SLCs and 2 NACs
- CAX-NAC
- Includes 2 NACS

Optional Network Module, select one if networking Remote Annunciators, Command Centers, Axis AX Series Intelligent Fire Alarm Panels and/or Axis AX"V" Series Intelligent Integrated Audio Panels. (For fiber optic networking refer to AX-MOXA data sheet):

- CAX-NET4: Ad-NeT-PluS Network Interface Module (Style 4). Maximum 64 nodes; panels and/or remote annunciators.
- CAX-NET7: Ad-NeT-PluS Network Interface Module (Style 7). Maximum 200 nodes; panels and/or remote annunciators.

Optional Digital Communicator, select both items below if required:

- D9068P: Digital Alarm Communicator FACP Powered, PCB only, serial port compatible, w/cables. Requires CAX-SEB board to interface to the Main PCB (Base Card).
- CAX-SEB: Axis AX Series RS-232 Serial Expansion Board. Use with D9068P Communicator.





Step 3: Audio Support

For systems requiring audio support, the following modules are required:

CAV-AMP-80: Audio Amplifier Module includes built-in 16 message generator, dual booster inputs and two 40 watt, 25 Vrms speaker outputs. Includes mounting plate and mounting hardware. The smaller Modular Command Center will support one amplifier, the larger Modular Command Center will support two amplifier modules.

CAX-PSU-6: Power Supply Charger Module, 5.0A @ 24VDC, filtered & regulated, for use with CAV-AMP-80 Amplifier. The smaller Modular Command Center will support one CAX-PSU-6, the larger Modular Command Center will support two CAX-PSU-6 modules.

CAV-MIC: Microphone with enclosure. Mounts to all Modular Command Center inner doors, in a single aperture location.





Step 4: Fire Fighter Telephone Support

For systems requiring firefighter telephone support, the AV-TEL or AV-TEL-MCCS module is required. The AV-TEL/AV-TELMCCS mounts in a double aperture location on the inner door.

AV-TEL: Is a firefighter phone with Telephone Riser Module and enclosure, providing one riser which supports up to 35 addressable or conventional firefighter telephones/jacks.

AV-TEL-MCCS: Is a firefighter phone for use with the AV-TELRISER6. The AV-TEL-RISER6 provides 6 risers each supporting 35 addressable or conventional firefighter telephones/jacks.

Step 5: Options Modules Mounted to Back Box

AX-RL4: Four Relay Output Card, Form C relays rated 1.0A @ 30 VDC/VAC, freely programmable. Cannot be installed if AV-AMP-80 is installed, however can be installed in a remote enclosure.

AX-RL8: Eight Relay Output Card with two (2) Form C and six (6) - Form A relays rated 1.0A @ 30 VDC/VAC, freely programmable. Cannot be installed if AV-AMP-80 is installed.

AX-MDM: 24 Volt DC, Modem Module. Cannot be installed if AV-AMP-80 is installed, however can be installed in a remote enclosure.

Step 6: Option Modules that Mount to Inner Doors

Each of the modules below mounts in a single aperture location on the inner door. Mounting hardware and cabling included.

AX-ASW-16: 16 Switches, with three integrated, programmable LED’s per switch (red, yellow, green).

AX-I/O-48: 16 Switch inputs and 48 LED driver outputs. Supports up to 5 optional AX-RL10 Relay Output Modules, for a total of 50 relay outputs. Each AX-RL10 module provides ten Form C A relays rated 1.0A @ 30 VDC/VAC. Comes with 1 foot long ribbon cable.

AX-012: AX Series Thermal Printer with mounting hardware.

AX-SAP: Single aperture blank metal plate. Comes with mounting hardware.

AX-DAP: Double aperture blank metal plate. Comes with mounting hardware.

Order Codes and Options

CCM-01-BB	22.6"H X 20.3"W X 5.5"D, 3X3 Back Box
CCM-01-ID1	Inner Door 1 Double and 7 Single Apertures
CCM-01-ID2	Inner Door 2 Double and 5 Single Apertures
CCM-01-ID3	Inner Door 9 Single Apertures
CCM-01-OD	Outer Door
CCM-02-BB	35.9"H X 20.3"H X 5.5"D, 3X5 Back Box
CCM-02-ID1	Inner Door 1 Double and 13 Single Apertures
CCM-02-ID2	Inner Door 2 Double and 11 Single Apertures
CCM-02-ID3	Inner Door 15 Single Apertures
CCM-02-OD	Outer Door

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