Axis AX

Modular Command Centers

Axis AX Command Centers are built on the backbone of our Axis Intelligent fire panels to support a wide variety of configurations and applications. The CCM-01 and CCM-02 Command Centres are supplied in modular format for easy expansion and customization.

All of our Command Centers are fully compatible with Axis AX audio and telephone options and can be configured for master control or peer-to-peer. Master control mode allows only one command center to manually operate audio and main system control functions. Advanced's Riser 6 Audio Module can be mounted inside the command center or remotely for added security.

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 AX-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, telephone control, 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.

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 #6105A2

Modular Command Centers may be configured to support firefighter telephone systems. An AV-TEL contains a Command Center Telephone and a single telephone riser control module. It may be easily installed to the inner door of a Modular Command Center. Up to 35 firefighter phones may be wired/monitored per telephone riser and multiple risers (up to six) can be configured. Risers are supervised for open circuits, short circuits and grounds and will continue to operate should these conditions occur. Firefighter telephones themselves are fully supervised as well. When a field telephone is taken off hook, a buzzer sounds at the Command Center and a corresponding LED blinks. When the Command Center Operator presses the individual phone select button, the field telephone is then connected. At that time, the LED at the field telephone station is illuminated indicating successful connection.

Up to 5 field telephones, per riser, may be connected to the Command Center phone at one time on a "party line" (30 for six risers). In addition to a wide array of firefighter telephones, the AV-JACK is an addressable firefighter phone jack that includes a red "phone active" LED that turns on when the Command Center telephone connection is made. Wiring to each AV-JACK is fully supervised. Firefighter phones and jacks are available as addressable or conventional, meeting both new and retrofit installation requirements.

An AV-AMP-80, Audio Amplifier Module, with associated AX-PSU-6 Power Supply/Charger and AV-MIC, Microphone Assembly installed in a Modular Command Center adds audio capability at the head end of a fire system. Each AV-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 notification requirements. Through either manual or automatic controls, live or recorded audio messages can be sent to any location in a facility.

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 Notification message throughout a facility press the All Evac, All Alert or Mass Notification 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 AV-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 Axis AX Series main PCB (base card), one expandable AX-PSU power supply, one AV-AMP-80 Amplifier, one AX-PSU-6 Power Supply Charger, or one of either AX-RL4 or AXRL8 Relay Module or AX-MDM Modem Module and one D9068P Communicator.
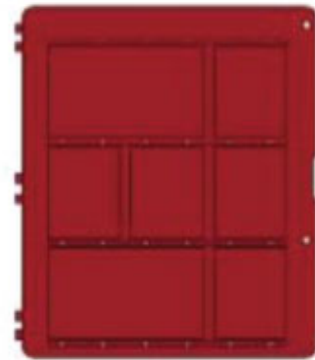
Inner Door Options – CCM-01-ID1, CCM-01-ID2, CCM-01-ID3

CCM-01-ID1: 1 double aperture and 7 single aperture openings. Attaches to CCM-01-BB back box. Has 1 double aperture, which supports mounting of AX-DSP Display/Keyboard Module or AXDAP blank plate, and 7 single aperture openings. Single aperture openings support: AX-SAP, AX-I/O-48, AX-ASW-16, AX-012 and AV-MIC modules. Metalwork and mounting hardware only.
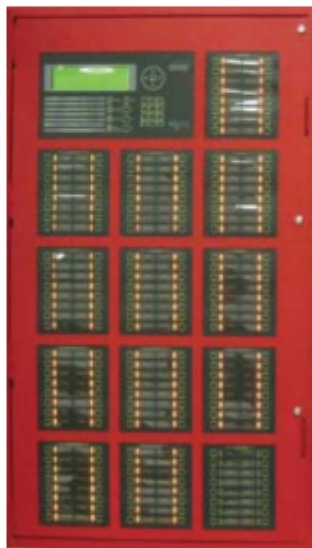
CCM-01-ID2: 2 double apertures and 5 single aperture openings. Attaches to CCM-01-BB back box. Has 2 double apertures, which support mounting of AX-DSP Display/Keyboard Module, AX-DAP blank plate and AV-TEL Telephone Module, and 5 single aperture openings. Single aperture openings support: AX-SAP, AX-I/O-48, AX-ASW-16, AX-012 and AV-MIC modules. Metalwork and mounting hardware only.

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

Outer Door – CCM-01-OD: Attaches to 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 Axis AX Series main PCB (base card), one expandable AX-PSU power supply, two AV-AMP-80 Amplifiers, two AXPSU-6 Power Supply Chargers, one of either AX-RL4 or AX-RL8 Relay Modules or AX-MDM Modem Module and one D9068P Communicator.

Inner Door Options – CCM-02-ID1, CCM-02-ID2, CCM-02-ID3

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

CCM-02-ID2: 2 double apertures and 11 single aperture openings. Attaches to CCM-02-BB back box. Has 2 double aperture openings, which support mounting of AX-DSP Display/Keyboard Module, AX-DAP blank plate and AX-TEL Telephone Module, and 11 single aperture openings. Single aperture openings support: AX-SAP, AXI/O-48, AX-ASW-16, AX-012 and AV-MIC modules. Metalwork and mounting hardware only.

CCM-02-ID3: 15 Single aperture openings. Attaches to CCM-02- BB back box. Has 15 single aperture openings. Single aperture openings support: AX-SAP, AX-I/O-48, AX-ASW-16, AX-012 and AV-MIC modules. Metalwork and mounting hardware only.

Outer Door – CCM-02-OD

Attaches to CCM-02-BB back box. Metalwork, plexiglass, key lock and mounting hardware only.

Step 2: Main PCB's

Standard System Modules, select one each:

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

System Base Card, select one of the following:

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

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

- AX-LPD: Includes 2 SLCs and 2 NACs
- AX-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):

- AX-NET4: Ad-NeT-PluS Network Interface Module (Style 4). Maximum 64 nodes; panels and/or remote annunciators.
- AX-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 AX-SEB board to interface to the Main PCB (Base Card).
- AX-SEB: Axis AX Series RS-232 Serial Expansion Board. Use with D9068P Communicator.

AX-LPD 2 SLC & 2 NAC Expansion - AX-CTL-2PCB Base Card

Step 3: Audio Support

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

AV-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.

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

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

AV-AMP-80 Audio Amplifier

AV-MIC Microphone

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