Axis AX Modular Command Centres

Axis AX modular command centres are built on the backbone of our Axis AX 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 customisation. They have been designed to support a wide variety of applications and are fully compatible with the full range of Axis AX fire alarm control panels.

Our command centres are also fully compatible with Axis AXaudio and telephone options and can be configured for master control or peer-to-peer. Master control mode allows only one command centre to manually operate audio and main system control functions. Advanced's telephone Riser module can be mounted inside the command centre or remotely for added security.

To simplify installation, programming, troubleshooting, training and support, all command centres can be programmed using the same Windows-based programming tools. In addition, they are fully compatible with a range of Axis AX main PCBs, option modules, peripherals and intelligent devices.

To simplify control and operation of a large, networked, wide area or high rise system, each modular command centre will support up to 252 individually assignable switches through the use of up to sixteen AX-ASW-16 Switch LED Modules. These modules mount to the inner doors. The switch action can 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 with a steady light and/or to flash. There is also space for user-defined text to clearly identify the function of each switch LED. This versatility simplifies operation and control and means that status is readily available and quickly identified.

Examples of switch operations include an and HVAC control, paging area select, message select, telephone control, purging and zone/area/point bypass. 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 modular command centres
- Audio/visual synchronisation (panel & network wide)
- Two standard sizes (3x3 and 3x5)
- Up to 200 networked panels
- Multiple control options

Listings and Approvals

- Certified to UL 864 10th Edition - File No. S35979
- CSFM Approved: Pending
- NYCFD COA: Pending

Modular command centres can be configured to support firefighter telephone systems. The AV-TEL2 system range contains a command centre telephone and a single telephone riser control module with associated devices such as switch cards and dedicated telephone display LCD. It may be easily installed to the inner door. Up to 250 addressable firefighter phones can be wired/monitored per telephone riser. 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 the hook, a buzzer sounds at the command centre and a corresponding LED blinks. When the command centre 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 centre phone at one time on a “party line” (30 for six risers). In addition to a broad range of firefighter telephones, the AV-CJACK is an addressable firefighter phone jack that includes a red “phone active” LED that turns on when the command centre 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 centre adds audio capability at the head end of a fire system. Each AV-AMP-80 has two 40 Watt speaker circuits (these can be programmed as 1:1 backup) and can play up to 16 different messages. Live or recorded audio messages can be sent to any location in a facility through either manual or automatic controls.

Control functions include: All Call, All Evac, All Alert, Message Select and Area Select. For immediate 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, push the All Evac, All Alert or Mass Notification Message button. To play a particular message in specific areas, use individual message selection buttons followed by the individual area selection buttons.

A typical high-rise application can be configured with Advanced AV-VB audio boosters on a per floor (area) basis. The boosters are controlled by the Control-by-Event logic at the command centre to generate specific messages upon specific conditions. For example, it is easy to program a typical fire floor, floor above and floor below evacuate message that is simultaneous with adjacent floor alert messages, while simultaneously providing the capability to override automatic messages at any time with manual paging to all or selective areas. While offering all of this power and flexibility, the audio and visual signals maintain full synchronisation when required.

The modular command centres are available in two basic enclosure sizes. The smaller of the two enclosures (also referred to as the 3x3 modular command centre) measures 22.6”H x 20.25”W x 5.5”D. The larger of the two enclosures (also referred to as the 3x5 modular command centre) measures 35.9”H x 20.3”W x 5.5”D.

Selecting the right components to create a customised modular command centre is straightforward. Follow steps 1-6 below.

Step One: Enclosure Selection - Small Enclosure

Backbox – CCM-01-BB. Dimensions: 22.6”H x 20.25”W x 5.5”D

Provides 3x3 module support. 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.

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-LED16RY, AX-LED32R, AX-LED32Y, AX-PRN, AX-ACM6 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-TEL2-MCCS Telephone Module, and 5 single aperture openings. Single aperture openings support AX-SAP, AX-I/O-48, AX-ASW-16, AX-LED16RY, AX-LED32R, AX-LED32Y, AX-PRN, AX-ACM6 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-LED16RY, AX-LED32R, AX-LED32Y, AX-PRN, AX-ACM6 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.



CCM-01-ID1 CCM-01-ID2 CCM-01-ID3

Step One: Enclosure Selection - Large Enclosure

Backbox – CCM-02-BB. Dimensions: 35.9”H X 20.25”W X 5.5”D

Provides 3x5 module support. 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, and one of either AX-RL4 or AX-RL8 relay modules.

Inner Door Options – CCM-02-ID1, CCM-02-ID3, CCM-02-ID4

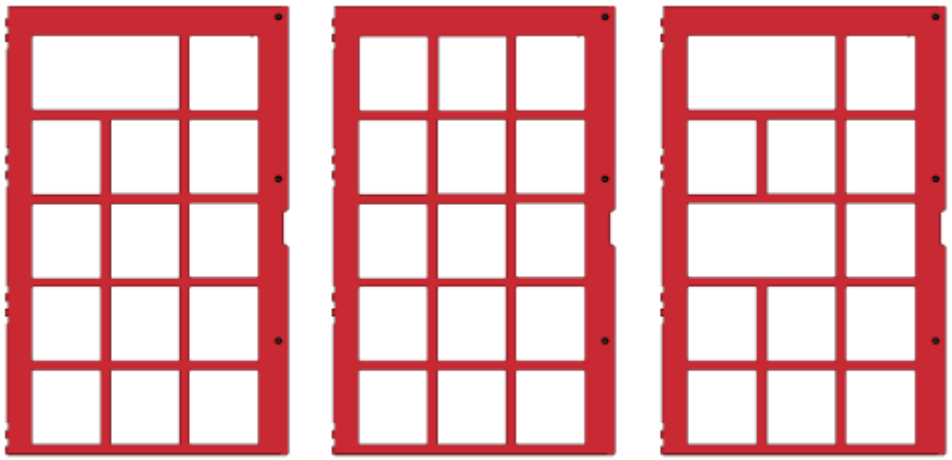
CCM-02-ID1:1 double aperture and 13 single aperture openings. Attaches to CCM-02-BB back box. Has 1 double aperture opening, which supports mounting of AX-DSP display/keyboard module or AX-DAP blank plate, and 13 single aperture openings. Single aperture openings support AX-SAP, AX-I/O-48, AX-ASW-16, AX-LED16RY, AX-LED32R, AX-LED32Y, AX-PRN, AX-ACM6 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-LED16RY, AX-LED32R, AX-LED32Y, AX-PRN, AX-ACM6 and AV-MIC modules. Metalwork and mounting hardware only.

CCM-02-ID4:2 double apertures and 11 single aperture openings. Attaches to CCM-02-BB back box. Has two double aperture openings, which support mounting of AX-DSP display/keyboard module, AX-DAP blank plate and AV-TEL2-MCCS telephone module, and 11 single aperture openings. Single aperture openings support AX-SAP, AX-I/O-48, AX-ASW-16, AX-LED16RY, AX-LED32R, AX-LED32Y, AX-PRN, AX-ACM6 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.



CCM-02-ID1 CCM-02-ID3 CCM-02-ID4

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 centres, Axis AX intelligent fire alarm panels and/or Axis AX"V" series intelligent integrated audio panels. (For fiber optic networking refer to AX-MOXA datasheet):

- AX-NET4: Ad-NeT-PluS network interface module Class B. Maximum 64 nodes; panels and/or remote annunciators.
- AX-NET7: Ad-NeT-PluS network interface module Class X(A). 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.





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 centre will support one amplifier; the larger modular command centre 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 centre will support one AX-PSU-6; the larger modular command centre will support two AX-PSU-6 modules.

AV-MIC: Microphone with enclosure. Mounts to all modular command centre inner doors, in a single aperture location.





Step 4: Firefighter Telephone Support

The AV-TEL2-MCCS module is required for firefighter telephone support. This mounts in a double aperture location on the inner door.

AV-TEL2-MCCS: Is a firefighter phone for use with the AV-TEL2-RISER. The AV-TEL2-RISER provides a single riser supporting 250 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.

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

AX-ASW-16: 16 switches, with three integrated, programmable LEDs 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 10 Form C A relays rated 1.0A @ 30 VDC/VAC. Comes with a 1-foot long ribbon cable.

AX-LED16RY: LED annunciator module, 16 red and 16 yellow LEDs.

AX-LED32R: LED annunciator module, 32 red LEDs.

AX-LED32Y: LED annunciator module, 32 tellow LEDs.

AX-PRN: Axis AX thermal printer with mounting hardware.

AX-ACM6: Fan/damper module

AV-MIC: microphone assembly

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

AX-DSP: Keyboard display.

AV-TEL2-MCCS: Firefighter telephone assembly with standard telephone.

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

Order Codes and Options

CCM-01-BB	22.6"H X 20.25"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 20.25"W X 5.5"D, 3X5 Back Box
CCM-02-ID1	Inner Door 1 Double and 13 Single Apertures
CCM-02-ID3	Inner Door 15 Single Apertures
CCM-02-ID4	Inner Door 2 Double and 11 Single Apertures
CCM-02-OD	Outer Door

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