



# FDNY

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## **CERTIFICATE OF APPROVAL # 6105A2** **THIS CERTIFICATE IS REVOCABLE, NOT TRANSFERABLE** **and EXPIRES on MARCH 06, 2020**

By order of Fire Commissioner Daniel A. Nigro, and pursuant to Section FC 112 of the New York City New Fire Code, the following equipment or system is accepted for use provided the conditions as outlined below are in full compliance.

**Manufacturer:** Advanced Fire Alarm Systems, Inc.

**Trade Name:** Advanced Fire Alarm Systems, Inc.

**Product:** Fire Alarm Control Panels  
AxisAX Series Intelligent Fire Alarm Control Panels

**Basic Model Number(s):** AX-CTL-1C, AX-CTL-1, AX-CTL-1L, AX-CTL-2, AX-CTL-4, AX-CTL-1V, AX-CTL-2V, AX-CTL-4V, AX-CC1-16, AX-CC2-16, AX-CC4-14, CCM-01, CCM-02, AX-DGP-FACP  
(see Table 1 for more details)

**Pertinent Code Section(s):** Section FC 901 of the New York City Fire Code

**Test(s) Standards(s):** UL 864 9<sup>th</sup> Edition

**Laboratory:** Intertek Testing Services NA Inc. (ETL)

**Test Report(s):** Report No. 101564744NYM-001 (Replaces 3118002NYM-001B); Issued 10-22-07; Revised 01/12/17  
Report No. 3186781NYM-001; Issued 22-09-09; Revised 10/16/14  
Report No. 100027836NYM-001c; Issued 03-02-11; Revised 04/15/16  
Report No. 100027836NYM-002; Issued 07-27-2011  
Report No. 101294571NYM-001; Issued 10/21/2013; Revised 02/05/15  
Report No. 102445509NYM; Issued 01/28/2016  
Report No. 102136384CRT-2.1; Issued 06/05/2015  
Report No. 102136384CRT-2.2; Issued 06/19/2015

**Description:** Model No. AX-CTL-1C was added as per the amendment.  
The AxisAX Series is a family of intelligent life safety fire alarm control systems. The product ranges from a simple one-loop fire alarm control system to customized audio evacuation systems with voice paging, firefighter telephone communications and status and control LEDs/switches. These systems can exist as stand-alone or within a true peer-to-peer, token passing network system, capable of supporting 200 nodes. The following components (Table 1) are available for the AxisAX Series system and have been Listed by Intertek Testing Services Inc. (ETL)

**Fire Department, City of New York**

9 MetroTech Center, Brooklyn New York 11201-3857

Table 1

Part/Model #	Description
<b>AxisAX Series Fire Alarm Controls</b>	
AX-CTL-1C	AX Series Single Loop Fire Alarm Control Panel with small compact enclosure, power supply/charger, 1 SLC, 2 NACs, 3 auxiliary relays (enclosure supports batteries 7Ah – 18Ah)
AX-CTL-1	AX Series Intelligent Single Loop Fire Alarm Control Panel with small AX Series enclosure, power supply/charger, 1 SLC, 2 NACs, 3 auxiliary relays (enclosure supports batteries 7Ah – 18Ah)
AX-CTL-1L	AX Series Intelligent Single Loop Fire Alarm Control Panel with standard AX Series enclosure, power supply/charger, 1 SLC, 2 NACs, 3 auxiliary relays (enclosure supports batteries 7Ah – 18Ah)
AX-CTL-2	AX Series Intelligent Fire Alarm Control Panel with cabinet, power supply/charger, 2 SLCs, 2 NACs, 3 auxiliary relays (cabinet supports batteries 7Ah – 18Ah)
AX-CTL-4	AX Series Intelligent Fire Alarm Control Panel with cabinet, power supply/charger, 4 SLCs, 4 NACs, 3 auxiliary relays, 5A expansion power supply (cabinet supports batteries 7Ah – 18Ah)
AX-CTL-1V	AX “V” Series Intelligent Single Loop Fire Alarm Control Panel with Integrated Audio/Microphone in standard AX Series enclosure, power supply/charger, 1 SLC, 2 NACs, 3 auxiliary relays, 2 40 watt speaker circuits, 5A amplifier power supply charger, and microphone (enclosure does not supports batteries us AX-BAT battery box)
AX-CTL-2V	AX “V” Series Intelligent Fire Alarm Control Panel with Integrated Audio/Microphone in standard AX Series enclosure, power supply/charger, 2 SLCs, 2 NACs, 3 auxiliary relays, 2 40 watt speaker circuits, 5A amplifier power supply charger, and microphone (enclosure does not supports batteries us AX-BAT battery box)
AX-CTL-4V	AX “V” Series Intelligent Fire Alarm Control Panel with Integrated Audio/Microphone in standard AX Series enclosure, power supply/charger, 4 SLCs, 4 NACs, 3 auxiliary relays, 2 40 watt speaker circuits, 5A amplifier power supply charger, and microphone (enclosure does not supports batteries us AX-BAT battery box)
AX-CC1-16	AX Series Command Center Single Loop Fire Alarm Control Panel with Integrated Audio/Microphone in 3x3 matrix AX Series enclosure, power supply/charger, 1 SLC, 2 NACs, 3 auxiliary relays, 16 switch/48LED switch module, 2 40 watt speaker circuits, 5A amplifier power supply charger, and microphone (enclosure does not supports batteries us AX-BAT battery box)
AX-CC2-16	AX Series Command Center Fire Alarm Control Panel with Integrated Audio/Microphone in 3x3 matrix AX Series enclosure, power supply/charger, 2 SLCs, 2 NACs, 3 auxiliary relays, 16 switch/48LED switch module, 2 40 watt speaker circuits, 5A amplifier power supply charger, and microphone (enclosure does not supports batteries us AX-BAT battery box)

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Part/Model #	Description
AX-CC4-16	AX Series Command Center Fire Alarm Control Panel with Integrated Audio/Microphone in 3x3 matrix AX Series enclosure, power supply/charger, 4 SLCs, 4 NACs, 3 auxiliary relays, 5A expansion power supply, 16 switch/48LED switch module, 2 40 watt speaker circuits, 5A amplifier power supply charger, and microphone (enclosure does not supports batteries us AX-BAT battery box)
CCM-01	AX Series 3x3 Modular Command Center can support one AX Series Fire Alarm Control Panel, one 5A expansion power supply, one 2 40 watt speaker circuits, one 5A amplifier power supply charger, one microphone, one firefighter telephone, one 8 point relay, four point relay, modem, and one digital dialer (enclosure can support batteries based on optional modules installed if no room use AX-BAT battery box) Available inner doors: CCM-01-ID1 (one double, seven single apertures) CCM-01-ID2 (two double, five single apertures) CCM-01-ID3 (nine single apertures)
CCM-02	AX Series 3x5 Modular Command Center can support one AX Series Fire Alarm Control Panel, one 5A expansion power supply, two 2 40 watt speaker circuits, two 5A amplifier power supply charger, one microphone, one firefighter telephone, one 8 point relay, four point relay, modem, and one digital dialer (enclosure can support batteries based on optional modules installed if no room use AX-BAT battery box) Available inner doors: CCM-02-ID1 (one double, thirteen single apertures) CCM-02-ID2 (two double, eleven single apertures) CCM-02-ID3 (fifteen single apertures)
AX-DGP-FACP	AX Series Data Gathering Panel can support one AX Series Fire Alarm Control Panel, one 5A expansion power supply, three 2 40 watt speaker circuits, three 5A amplifier power supply charger, two AX-PSN NAC boosters, one 8 point relay, four point relay, modem, and one digital dialer (enclosure can support batteries based on optional modules installed if no room use AX-BAT battery box)
AV-PHONE-NODE	AX Series Dedicated Firefighter Emergency Phone Node (Standalone or Networked w/AX Series FACPs) supports AX Series base card 1, 2 or 4 SLC loops dedicated for firefighter emergency phones, AX-DSP/T firefighter emergency phone keyboard display and firefighter command center phone. Can also support various Advanced telephone riser modules and power supplies.
<b>AxisAX Series Fire Alarm Control Modules and Accessories</b>	
AX-DSP/T	Dedicated Firefighter Emergency Phone Keyboard Display
AX-PSU	5 Amp Expansion Power Supply
AX-LPD	2 SLCs, 2 NACs Expansion Module for AX-2 System

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Part/Model #	Description
AX-NAC	2 NACs Expansion Module for AX-2 System
AX-NET7	Network Interface Card (Style 7)
AX-NET4	Network Interface Card (Style 4)
AX-LZA-100	100 Red Zone/Point LED Annunciator (front cabinet mount)
AX-LZA-200	200 Red Zone/Point LED Annunciator (front cabinet mount)
AX-RL8	8-Way Relay Output Card (Programmable)
AX-ANN-D	Remote Graphical LCD Annunciator w/o Control (Style 4)
AX-ANN-D/ST7	Remote Graphical LCD Annunciator w/o Control (Style 7)
AX-ANN-C	Remote Graphical LCD Annunciator w/Control (Style 4)
AX-ANN-C/ST7	Remote Graphical LCD Annunciator w/Control (Style 7)
AXS-002	Optional Key Switch
AXM-009	AX-ANN Optional Bezel
AX-CTY	City Tie Module
AX-MDM	Modem Card
AX-RL4	4-Point Relay Card
AX-LAN	LAN Interface Card [IP Gateway] (Style 4)
AX-LAN/ST7	LAN Interface Card [IP Gateway] (Style 7)
AX-RL10	10-Way Relay Output Card
AX-I/O-48	Switch Input/LED Drive Output Module
AX-ASW-16	Switch/LED Module

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Part/Model #	Description
AX-LED16RY	LED Module 16 Red, 16 Yellow
AX-LED-32R	LED Module, 32 Red
AX-LED-32Y	LED Module, 32 Yellow
AX-LZA-CAB1	Local Zone Annunciator Cabinet, 1 Aperture
AX-LZA-CAB2	Local Zone Annunciator Cabinet, 2 Aperture
AX-LZA-CAB4	Local Zone Annunciator Cabinet, 4 Aperture
AV-TEL	Telephone and Telephone Riser Module
AV-TEL-MCCS	Multiple Command Center Firefighter Phone
AV-TEL-RISE6	6-Way Multiple Telephone Riser Module
AV-TEL6-REM	Remote 6-Way Riser Enclosure with Power Supply
AV-TEL2-RISE	Firefighter Phone System2 Telephone Riser Module
AV-TEL2-MCCS	Firefighter Phone System2 Multi Command Center Firefighter Phone
AV-TEL2-MCCS/P	Firefighter Phone System2 Multi Command Center Firefighter Phone w/Push to Talk
AV-TEL2-PPB	AV-TEL2-RISE Plug-in Audio Module
AV-TEL2-CAB	Remote Cabinet w/Single AV-TEL2-RISE
AV-TEL2-REM	Remote Enclosure w/Single AV-TEL2-RISE and AX-PSU-6 Power Supply Charger
AV-TEL2-BB	Firefighter Emergency Phone Backbox
AV-TEL2-BBM	Firefighter Emergency Phone Backbox w/Magnetics
AV-TEL2-MB	Trim Ring for Firefighter Emergency Phone Backbox
AV-TEL2-SWPB	Secondary Module Installed in AV-TEL2-CS1, -CS2, -CS3 and -CS4

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Part/Model #	Description
AV-TEL2-CS1	Secondary Handset/Chassis Assembly Coil Cord, Standard Phone
AV-TEL2-CS2	Secondary Handset/Chassis Assembly Coil Cord, Push to Talk Phone
AV-TEL2-CS3	Secondary Handset/Chassis Assembly Armored Cord, Standard Phone
AV-TEL2-CS4	Secondary Handset/Chassis Assembly Armored Cord, Push to Talk Phone
AV-TEL2-D1	Firefighter Emergency Phone Door (CAT 30 Lock)
AV-TEL2-D2	Firefighter Emergency Phone Door for Magnetic Latch
AV-TEL2-LP	Firefighter Emergency Phone Door Keylock Plate
AV-TEL2-BG	Firefighter Emergency Phone Door Breakglass
AV-TEL2-NCMS	Noise Canceling Microphone for Standard Phone Handset
AV-TEL2-NCMP	Noise Canceling Microphone for Push to Talk Phone (PTT) Handset
AV-TEL2-RC	Handset Retaining Clip
AV-TEL2-P	Portable Firefighter Handset, Coiled Cord, ¼" Plug
AV-TEL2-PT	Portable Firefighter Handset, Push to TALK (PTT), Coiled Cord, ¼" Plug
AX-DCF	DC Supply Filter Module
AV-CTEL	Conventional Phone Circuit Interface Module
AX-CZM	Conventional Zone Module
AX-DCI	Isolation Module
AV-TEL-SUP	Firefighter Warden Station Interface Module
AX-MOXA	Fiber Optic Converter Module
AX-012	Thermal Strip Printer

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Part/Model #	Description
D9068E	5-point Digital Alarm Communicator Transmitter
D9068P	RS-232 Serial Digital Alarm Communicator Transmitter
AX-SEB	Serial Expansion Board for D9068P DACT
AX-048	Standalone Thermal Printer
AX-PSU-6	Power Supply Charger
AV-AMP-80	Audio Amplifier
AX-DGP	Data Gathering Panel (for Listed Components)
AX-BMS	Building Management Systems Interface (Style 4)
AX-BMS/ST7	Building Management Systems Interface (Style 7)
AX-BAT	Battery Enclosure
AX-BAT-TR	Battery Tray
AX-ANN-TP	Remote Graphical LCD Annunciator Tamperproof Enclosure
<b>AxisAX Series Compatible Addressable Devices</b>	
AX-APS-F1	AX Series Intelligent Manual Pull Station, Single Action
AX-APS-F2	AX Series Intelligent Manual Pull Station, Dual Action
AX-APS-F1-NYC	AX Series Intelligent Manual Pull Station, Single Action, NYC White Stripe
AX-APS-F2-NYC	AX Series Intelligent Manual Pull Station, Dual Action, NYC White Stripe
AX-APS-B1	Blue, AX Series Intelligent Manual Pull Station, Single Action
AX-APS-Y1	Yellow, AX Series Intelligent Manual Pull Station, Single Action
AX-APS-G1	Green, AX Series Intelligent Manual Pull Station, Single Action

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Part/Model #	Description
AX-APS2-F1	AX Series Intelligent Manual Pull Station, Toggle Switch, Single Action
AX-APS2-F2	AX Series Intelligent Manual Pull Station, Toggle Switch, Dual Action
AX-APS2-F1-NYC	AX Series Intelligent Manual Pull Station, Toggle Switch, Single Action, NYC White Stripe
AX-APS2-F2-NYC	AX Series Intelligent Manual Pull Station, Toggle Switch, Dual Action, NYC White Stripe
AX-APS2-B1	Blue, AX Series Intelligent Manual Pull Station, Toggle Switch, Single Action
AX-APS2-Y1	Yellow, AX Series Intelligent Manual Pull Station, Toggle Switch, Single Action
AX-APS2-G1	Green, AX Series Intelligent Manual Pull Station, Toggle Switch, Single Action
56000-005ADV	Intelligent Polycarbonate Dual Action Pull Station
56000-006ADV	Polycarbonate Pull Station Back Box
55000-790ADV	AX Dual Switch Monitor Module
55000-805ADV	AX Switch Monitor Module
55000-806ADV	AX Priority Switch Monitor Module
55000-820ADV	AX I/O Relay and Switch Monitor Module
55000-825ADV	AX NAC Controller Module
55000-830ADV	AX Mini Priority Switch Monitor Module
55000-831ADV	AX Mini Switch Monitor Module
55000-863ADV	AX Relay Output Module
55000-859ADV	120 VAC I/O Module
55000-765ADV	Mini Monitor Module
55000-041ADV	Sounder (Open Area), Red



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Part/Model #	Description
55000-042ADV	Sounder (Open Area), White
58000-011ADV	Enhanced Open Area Sounder Beacon (Red)
58000-012ADV	Enhanced Open Area Sounder Beacon (White)
55000-877ADV	Red Beacon
55000-878ADV	Clear w/Red LED Beacon
55000-879ADV	Amber Beacon
45681-525ADS	Sounder Beacon Base (Amber Beacon)
45681-526ADS	Sounder Beacon Base (Red Beacon)
45681-527ADS	Enhanced Sounder Beacon Base (Amber Beacon)
45681-524ADS	Enhanced Sounder Beacon Base (Red Beacon)
AV-TEL2-MWPB	Master Addressable Module Installed in AV-TEL2-CP1, -CP2, -CP3 and -CP4
AV-TEL2-CP1	Master Addressable Handset/Chassis Assembly Coil Cord, Standard Phone
AV-TEL2-CP2	Master Addressable Handset/Chassis Assembly Coil Cord, Push to Talk Phone
AV-TEL2-CP3	Master Addressable Handset/Chassis Assembly Armored Cord, Standard Phone
AV-TEL2-CP4	Master Addressable Handset/Chassis Assembly Armored Cord, Push to Talk Phone
<b>AxisAX Series Audio</b>	
AV-VBM	Audio Panel w/Microphone
AV-VB	Audio Booster
AX-PSU-6	Power Supply Charger

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Part/Model #	Description
AV-AMP-80	Audio Amplifier
AV-ZS	Audio Zone Splitter Module
AV-ZS-CM	AV Splitter Switch Module
AV-RMIC	All-Call Remote Microphone
AV-V70	Universal Audio Converter (70 Vrms)
AV-V70-KIT	Universal Audio Converter Add-On Circuit
<b>AxisAX Series NAC Booster Panel</b>	
AX-PSN-64	Remote NAC & Power Supply/Battery Charger – 6Amp
AX-PSN-106	Remote NAC & Power Supply/Battery Charger – 10Amp
AX-PSN-6PCB	Remote NAC & Power Supply/Battery Charger – 6Amp (AX-DGP Mount)
AX-PSN-10PCB	Remote NAC & Power Supply/Battery Charger – 10Amp (AX-DGP Mount)

**NOTE: Telephone jack shall not be used in NYC and they are excluded from this review.**

### **Conditions of Approval:**

1. All uses, configurations, arrangements and functions, application and installations shall comply with the provisions of New York City Construction Codes, specifically Building Code Chapter 9 & 1RCNY §3616-04. Further, the installation shall be in accordance with applicable provisions of New York City Fire Code, New York City Electrical Code, manufacturer’s installation requirements, and UL Standard 864.
2. The installation of Fire Alarm Control Panel must provide for fail-safe operation. This feature must assure that control of doors, locks, ventilation fans, and elevator recall will not be rendered inoperable in the event of a fire or power failure.
3. When used with a central office control communicator or a transmitter (DACT), the installation and operation of the equipment and devices shall comply with 3RCNY §901-01. It shall have the capability of transmitting separate and distinct signals to indicate manual pull station alarm, automatic detection alarm, sprinkler waterflow alarm, supervisory signal indications, and trouble indications. Using other technology that complies with 26.6 NFPA 72, 2010 edition shall be limited for **secondary means of communication**.

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4. Annunciator is acceptable under the condition that this unit shall be used to acknowledge the alarm and all its control function, including alarm silence and panel reset shall be disabled.
5. LAN Interface Cards (AX-LAN, AX-LAN/ST7) and Network Interface Card (AX NET4, AX NET7) shall be limited for **secondary means of communication** and comply with 26.6 NFPA 72, 2010 edition.
6. Models with voice system shall have the capability of individual, group, or entire building notification of alarm tone and voice intelligibility.
7. Installation of prerecorded evacuation messages would require a prior approval from the Department.
8. Only fiber optic cables listed by Nationally Recognized Testing Laboratory (NRTL) and meeting the New York City Electrical Code requirements shall be used.
9. A listed barrier gateway, integral with or attached to each control unit or group of control units, as appropriate, shall be provided to prevent the other systems from interfering with or controlling the fire alarm system.
10. All enclosures shall be painted red in color, except when installed as part of Fire Command Center or approved by Fire Department.
11. The above referenced Fire Alarm Control Panels shall be used only with listed fire alarm equipment and devices, with which the compatibility has been determined by Intertek Testing Services NA Inc. (ETL) listing report.
12. Intertek Testing Services NA Inc. (ETL) listing requirements and limitations shall be complied with.
13. Certificate of Approval number shall be plainly and permanently stamped or otherwise fixed upon each product by the applicant.
14. The Fire Department's conditions of approval shall be enumerated in the installation manuals and brochures that will be provided to all New York City buyers and users.
15. Fire Department Certificate of Approval does not constitute an endorsement or recommendation of your product by the Fire Department, but is a certification that your product is acceptable as of the date of issuance.
16. The Fire Department reserves the right to withdraw this approval at any time in the event there is a reasonable doubt that the product does not operate or perform as required by code, the conditions of this resolution or as represented in your application.
17. As the manufacturer of this product, you should be aware that any end user who fails to comply with the condition as outlined in the approval would be subject to enforcement action, which may include fines and imprisonment.
18. This Certificate of Approval does not grant the right to use any trademark associated with the New York City Fire Department (the letters FDNY, the FDNY Shield design, the FDNY Maltese Cross design, and the seal of the City of New York). The unauthorized use of trademarks in connection with the sale of commercial goods or services violates federal and state laws.

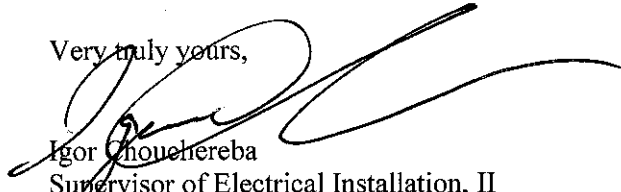
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19. Products marked to indicate the Certificate of Approval number might refer to the "NYC Fire Department" or "NYC Fire Dept" (e.g., "NYC Fire Dept Certificate of Approval #XXXX).

Any change in company name or ownership, product name, design or model number of any product included on this certificate must be immediately reported to this Department in writing.

When responding to this Department regarding this subject matter, kindly refer to F.P. Index # 1702089A and to Ting Yu Huang attention, 9 MetroTech Center #1S-44-K, phone (718) 999-0739.

Very truly yours,



Igor Chouhereba  
Supervisor of Electrical Installation, II  
Technology Management

c: Tamara Saakian, P.E., Director of Technology Management.

IC: TYH/1702089A