



## FA168C Control Panel



The FA168C is part of a new family of control panels from First Alert Professional that include advanced system features combined with simple and convenient end-user options. The FA168C can be configured as a two-partition control panel capable of protecting two independent areas. A common area option (partition 3) allows either partition to arm while leaving the common area (lobby, foyer, etc.) disarmed.

### Advanced Features

- **Exit Delay Reset** – After arming AWAY and exiting, the user may reenter the premises (within the exit delay period) without having to disarm the system. The system will automatically reset the exit and entry delays if the exit zone is tripped during the normal exit timeout period.
- **Alarm Cancel Verification** – In the event of a false alarm, after the user enters their code + off, "Cancelled Alarm" is displayed on an alpha keypad confirming that the alarm has been cancelled at the central station. "CA" will be displayed on a fixed English keypad.
- **Auto-Stay Mode** – If the user arms the system in the AWAY mode, but does not exit before the exit timeout expires, the system will automatically arm in the STAY mode, bypassing all interior zones.
- **Cross-Zoning** – For use in "false-alarm-prone" areas, two zones may be linked so that an alarm will occur only if both zones trip within a programmed time period.
- **Telephone Line Monitor** – The system constantly checks the phone line for proper voltage. Upon a phone line failure which exists longer than a programmed time (15 minutes max), the panel can be programmed to either display this condition at the keypads, display and sound a trouble at the keypads, or display, sound, and cause an output to activate.
- **Programmable Function Keys:** The A-B-C-D keys on a FA260KP or FA560KP keypad can be individually programmed to perform various system functions including:
  - panic zone
  - single button paging
  - display date and time temporarily
  - arm AWAY, STAY, or NIGHT-STAY
  - step arming (cycles once from STAY, to NIGHT-STAY, to AWAY)
  - output device activation
  - macro key

**NOTE:**The use of these programmed functions is independent of the Quick-Arm option.

- **Exit Delay Restart** – While in the STAY mode, the user can restart the exit/entry delay by simply pressing the [\*] key.

- **Output Control** – The FA168C supports up to 18 controllable outputs (16 X-10 or 4204 relays plus two on board triggers). The installer can program up to 48 independent functions for any of these 18 outputs. The system can automatically control these outputs based on events programmed in the system or via a schedule.

- **Scheduling** - A total of 32 schedules can be created, 16 of which can be modified by the end-user for easy control of lights and appliances. Schedules may include:
  - turning an output on or off
  - limiting the access of certain users
  - sending a latch key report to a pager
  - automatically arming or disarming the system

- **Standard Zone Types Include:** Entry/Exit (two entry times, one exit time), Perimeter, Interior Follower, Day/Night (trouble when disarmed/alarm when armed), 24 hour silent, 24 hour audible, 24 hour aux (keypad sounder only), Fire, Interior w/delay, arm STAY, arm AWAY, disarm, and no alarm response.

- **New Zone Types Include:**
  - Monitor Zone: This zone will not effect the arming of the system but will display a "check" message when faulted and automatically clear from the keypad when restored.
  - 24 hour Carbon Monoxide Monitor: will cause the bell output to pulse and will transmit a

special Contact ID code to the central station.

- Fire with Verification: Helps reduce false alarms by resetting the smoke detector for 12 seconds upon the initial short. A subsequent short detected within 90 seconds will trigger the fire alarm.

- Silent Burglary
- Key switch

- **Programmable Zone Types:** Four zone types may be added for various custom responses. Configurable options include response to entry/exit delays, response to opens and shorts, sounding, fault and dialer delays, and unique Contact ID codes.
- **Audible Exit Warning:** When the system is armed in the AWAY or MAXIMUM mode, the keypads will sound a warning of slow continuous beeps and change to fast beeps for the last 10 seconds. The system can also be programmed to display the exit time remaining in intervals of one-five seconds.
- **Long Range Radio Output and Dynamic Signaling Option:** The FA168C can support AlarmNet radios connected to the ECP (keypad) bus. This allows for extremely simple connections and programming of a 7845C, 7835CF, 7720PLUS, and 7820 radio transmitter for backup reporting to the central station. The radios will transmit all messages programmed to go to the primary telephone number. Dynamic Signaling allows you to assign which method of transmission will have priority and how long to wait before transmitting on the other medium.
- **Event Log:** The FA168C can store up to 100 events in four different categories. The event log can be read from an alpha keypad or from the Compass downloading software. The system will display the most recent event first and will overwrite the oldest event stored so you will always have history to review.
- **Paging:** The system can be programmed with four separate pager telephone numbers and you can select which conditions will be sent to each. You can also program any of the function keys (A-B-C-D) to act as a single button page (transmits 999-9999). There is also a latch key paging option which will send a special pager message (777-7777) if the system has not been disarmed by a scheduled time.
- **AAV:** Audio Alarm Verification (two-way voice) can be employed using an appropriate module, such as an Eagle Model 1250. The FA168C can trigger this module upon kissoff from the central station receiver and microphones and speakers connected to the Eagle board will allow a two-way voice dialog between the central station operator and the protected premises.

- **Night Stay Mode** – Designated interior zones remain active while others are bypassed.

### Zone Features:

- **Max Zones** – 48 with hardwire and wireless expansion
- **Standard Zones** – Eight end-of-line resistor supervised on-board zones support a variety of standard devices including both two-wire and four-wire smoke detectors.
  - Up to 16 two-wire smoke detectors on zone 1 (10 if using the ESL “clean me” option).
  - Four-wire smoke detectors on zones 2-8 (need a relay to reset power).
  - Zones 2-8 can be programmed for zone doubling (for a maximum of 15 on-board zones) or for zone balancing which provides tamper protection.
- **Hardwire Expansion Zones** – Up to 40 end-of-line resistor supervised hardwired zones may be added (Any combination of 4219 or 4229 modules - maximum of five total). These expansion zones may be programmed for either burglary or fire (four-wire smokes, heat detectors, or pull stations).
- **Wireless Expansion Zones** (5800 Series) – Up to 40 wireless zones may be added (not to exceed 48 zones max). Supports one 5800 series receiver.
- **User Codes** – 48 users include the system installer code, master code, and 46 secondary codes programmed with one of the following authority levels:
  - partition master code
  - user (security functions but can not add, modify, or delete other users)
  - arm only
  - guest (can disarm only if used to arm)
  - duress

### Communications:

- Built-in digital dialer complies with FCC Part 68: Registration no. 5GBUSA-44003-AL-E. Ringer equivalence = 0.1B
- Touch-tone (telco service required) or Pulse Dial option
- Dual Report, Split Report and Split-Dual Report options
- Low Speed Formats – 3+1, 4+1 and 4+2
- High Speed Formats – Contact ID and 4+2 Express
- Paging – Four separate phone numbers

### Power Specifications:

#### Control:

- Primary power 16.5 vac/25va plug-in transformer (supplied) optional 4300 - 16.5vac, 40va (for direct X-10 control)

- Auxiliary power 600ma @ 12vdc continuous
- Alarm power 2A @ 12vdc maximum
- Standby power 1-12vdc, 4ah battery minimum (supplied); 2-12vdc, 7ah batteries max.

**Keypads: (total of 8)**

- FA215KP 30ma standby; 50ma on alarm
- FA260KP 40ma standby; 100ma on alarm
- FA260RF 75ma standby; 175ma on alarm
- FA560KP 40ma standby; 130ma on alarm

**Expansion Devices:**

- 4204 (max of 4) 15ma standby plus 40ma for each active relay (175ma max)
- 4219 (max of 5) 16ma
- 4229 (max of 5) 36ma max
- FA4286 160ma
- 5881ENL, M, H 60ma

**Agency Listings:**

- UL Listed – Residential Fire and Burglary
- UL Listed – Commercial Burglary (w/FAULKKT)
- ULC Listed – Canada (FA168C-CN)
- CSFM Listed – California State Fire Marshal
- FCC – Part 68

**Ordering Information/Supported Devices:**

**Controls:**

- FA168C Control panel with transformer and 4AH battery in standard cabinet (lock included)
- FA168C-CN Control panel (Canada) with transformer and 4AH battery in standard cabinet (lock included)
- FAULKKT UL Mercantile listed cabinet (tamper switch, hardware and lock included)

**Keypads:**

- FA215KP Economical fixed-word LCD with backlit keys.
- FA260KP Deluxe fixed-word LCD with backlit LCD and keys.
- FA260RF Deluxe fixed-word LCD with backlit LCD and keys and a built-in 16-zone transceiver.
- FA560KP 32 character (2x16) Alpha-Numeric with backlit LCD and keys.

**Wireless Receivers:**

- 5881ENL 8 RF zones; for use with encrypted and non-encrypted devices
- 5881ENM 16 RF zones; for use with encrypted and non-encrypted devices
- 5881ENH 40 RF zones; use with encrypted and non-encrypted devices

**Wired Expansion:**

- 4204 Four programmable relays
- 4219 Eight-EOLR supervised zones
- 4229 Eight-EOLR supervised zones plus two programmable relays

**Convenience:**

- 4300 X-10 transformer/transmitter (replaces standard transformer)
- 4500 Thermostat module for FA4286
- FA4286 Telephone access module with temperature control and voice annunciation

**Wireless Transmitters:**

- 5802MN one-button activation
- 5802MN2 two-button activation
- 5804 four-button key fob
- 5804Watch four-button watch
- 5804-2 two-button key fob
- 5804E Encrypted wireless key fob
- 5804BD four-button, two-way with audible and visual status feedback (5800TM required)
- 5804BDV four-button, two-way with voice annunciation and visual status feedback (5800TM required)
- 5807LS photoelectric smoke detector with sounder
- 5807LST photoelectric smoke detector with 135 degree heat sensor and sounder
- 5808LST photoelectric smoke detector with 135 degree heat sensor and sounder
- 5809 135 degree heat sensor
- 5814 one-zone, micro-miniature
- 5816 two-zone
- 5816MN two-zone, miniature
- 5816TEMP low temp sensor
- 5817 three-zone
- 5818 one-zone, recessed
- 5819 three-zone shock processor
- 5819WHS three-zone shock processor with built-in shock sensor
- 5827 full-function, portable, wireless keypad
- 5827BD full-function, portable, wireless keypad with two-way status (5800TM required)
- 5849 audio & shock detector
- 5852 FlexGuard® adjustable glassbreak
- 5890 passive infrared detector
- 5890PI passive infrared detector with "Pet Immune" technology

**24-HR BATTERY STANDBY REQUIRED FOR FIRE INSTALLATIONS. USE 12V, 17.2AH BATTERY FOR 600mA AUX POWER. SEE INSTRUCTIONS.**  
**BATTERY CAPACITY FOR EMERGENCY BURGLARY STANDBY USE AT LEAST 4 HRS**

CHARGING VOLTAGE 13.8VDC. MAXIMUM CHARGING CURRENT 650mA.

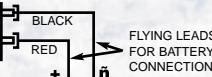
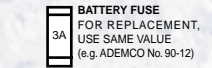
SEALED LEAD-ACID TYPE. BATTERY NORMALLY NEED NOT BE REPLACED FOR AT LEAST 3 YRS. TO DETERMINE TOTAL STANDBY LOAD ON BATTERY, ADD 100mA TO TOTAL OF AUX. POWER OUTPUT AND REMOTE KEYPAD CURRENTS.

USE UL LISTED LIMITED ENERGY CABLE FOR ALL CONNECTIONS  
**CLASS 2 PLUG-IN TRANSFORMER**  
 16.5VAC, 25VA (e.g. 1321).  
 (USE No. 1321CN IN CANADA)

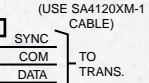
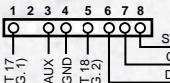
USE 4300 / 1321X10 TRANSFORMER INTERFACE IN PLACE OF 1321 OR 1321CN WHEN POWER LINE CARRIER DEVICES ARE BEING USED. (SEE INSTRUCTIONS FOR CONNECTIONS)

THIS EQUIPMENT SHOULD BE INSTALLED IN ACCORDANCE WITH THE NATIONAL FIRE PROTECTION ASSOCIATION'S STANDARD 72, CHAPTER 2 (NATIONAL FIRE PROTECTION ASSOCIATION, BATTERY-MARCH PARK, QUINCY, MA 02269).  
 PRINTED INFORMATION DESCRIBING PROPER INSTALLATION, OPERATION, TESTING, MAINTENANCE, EVACUATION PLANNING AND REPAIR SERVICE IS TO BE PROVIDED WITH THIS EQUIPMENT.

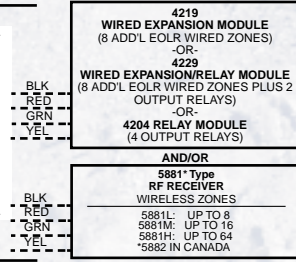
CONNECTION OF THE FIRE ALARM SIGNAL TO A FIRE ALARM HEADQUARTERS OR A CENTRAL STATION SHALL BE PERMITTED ONLY WITH THE PERMISSION OF THE LOCAL AUTHORITY HAVING JURISDICTION. THE BURGLAR ALARM SIGNAL SHALL NOT BE CONNECTED TO A POLICE EMERGENCY NUMBER.



**8-PIN CONNECTOR**  
 USED FOR 4300/1321X10 TRANSFORMER CONNECTIONS AND FOR ON-BOARD TRIGGERS. SEE INSTRUCTIONS.

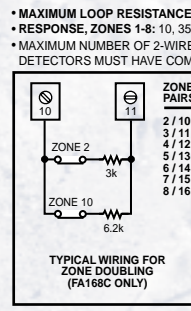
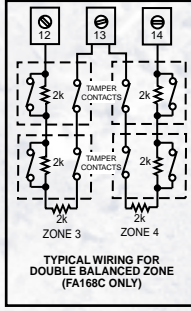
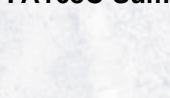
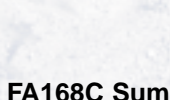
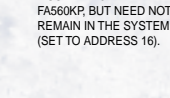
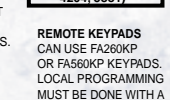
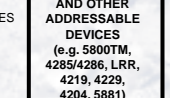
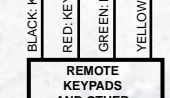
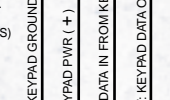
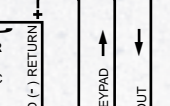
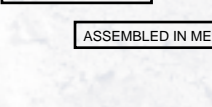
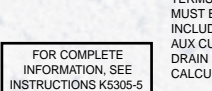
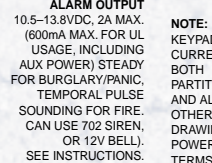
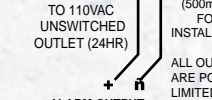
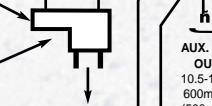
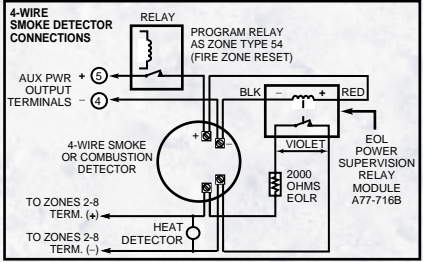


OPTIONAL FOR UP TO 40 ADDITIONAL ZONES (FROM EITHER OR BOTH GROUPS)



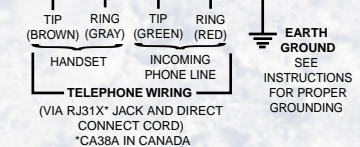
SET UNITS DIP SWITCH FOR DEVICE ADDRESSES 7-15 SEE INSTRUCTIONS.

SET RECEIVER'S DIP SWITCH FOR DEVICE ADDRESS OF "0" SEE INSTRUCTIONS.



- MAXIMUM LOOP RESISTANCE: (EACH ZONE) 300 OHMS (PLUS EOLR)
- RESPONSE, ZONES 1-8: 10, 350, OR 700 MSEC (PROGRAMMABLE)
- MAXIMUM NUMBER OF 2-WIRE SMOKE DETECTORS ON ZONE 1 IS 16; DETECTORS MUST HAVE COMPATIBILITY IDENTIFIER AS "A".

ZONE PAIRS	
2 / 10	2 / 10
3 / 11	3 / 11
4 / 12	4 / 12
5 / 13	5 / 13
6 / 14	6 / 14
7 / 15	7 / 15
8 / 16	8 / 16



TELEPHONE WIRING (VIA RJ31X\* JACK AND DIRECT CONNECT CORD) \*CA38A IN CANADA

DOC LOAD NO.: 3

FOR CONNECTION OF OPTIONAL 4285 OR 4286 VIP MODULES TO PHONE TERMINALS, SEE INSTRUCTIONS.

**WARNING:** TO PREVENT RISK OF SHOCK, DISCONNECT TELEPHONE LINE AT TELCO JACK BEFORE SERVICING THIS UNIT.

COMPLIES WITH FCC RULES, PART 68. FCC REGISTRATION NO. 5GBUSA-44003-AL-E RINGER EQUIVALENCE: 0.1B.

THIS DEVICE COMPLIES WITH PART 15 OF FCC RULES. OPERATION IS SUBJECT TO THE FOLLOWING TWO CONDITIONS: (1) THIS DEVICE MAY NOT CAUSE HARMFUL INTERFERENCE, AND (2) THIS DEVICE MUST ACCEPT ANY INTERFERENCE RECEIVED, INCLUDING INTERFERENCE THAT MAY CAUSE UNDESIRABLE OPERATION.

WEEKLY TESTING IS REQUIRED TO ENSURE PROPER OPERATION OF THIS SYSTEM. IN ADDITION, THIS SYSTEM MUST BE CHECKED BY A QUALIFIED TECHNICIAN AT LEAST ONCE EVERY THREE (3) YEARS.

ALL DEVICES AND ACCESSORIES USED IN A CANADIAN INSTALLATION MUST BE LISTED FOR USE IN CANADA

ASSEMBLED IN MEXICO

FA168C Summary of Connections

