



FA1660C

Integrated Fire and Burglary Control



The FA1660C is a powerful addition to the First Alert Professional family of commercial alarm panels, integrating burglary, CCTV and access control functions. Many new features are available that extend the applications of the FA1660C while simplifying end-user operation.

New Features:

- Panel linking allows authorized users to view and control up to eight other FA1660C panels. The user can select to access a single partition in another panel, control the status of multiple partitions in multiple panels by viewing them one panel at a time, or control the status of multiple panels by viewing them all simultaneously
- A two-way RS232 output can be connected to a home automation computer
- Enhanced paging capabilities. The FA1660C can transmit messages to a numeric pager directly or to an alpha pager using the Alpha Pager Module (APM). Up to eight different pager numbers can be programmed. The APM also supports a serial or parallel printer output
- Reset four-wire smoke detectors from the keypad
- Up and About feature ensures there is activity at the premises
- Flexible zone attributes include arming with the zone faulted, include in a group bypass, vent zone re-arm (the zone is active when restored), bypassed in one of three stay modes, bypassed when auto stay in effect (armed away but no entry detected)
- Scheduled check in with the Compass downloader. The downloader is programmed with the desired action

Standard Panel Features:

- 8 true partitions that offer multiple user access, log-in ability from other partitions and global arming/disarming
- Master keypad option (partition 9) which allows viewing the status of the other eight partitions simultaneously from an alpha keypad
- One partition can be assigned as the common lobby which allows other partitions to arm while leaving the common area (lobby, foyer, etc.) disarmed until all partitions are armed successfully
- Various levels of access control are available:
 - One relay per partition may be assigned to activate momentarily when entering a valid user code followed by the 0 key
 - Up to eight access control schedules can be created limiting the times user codes are valid
 - Support for up to 15 Vista-Key modules
 - Integration with PassPoint access control system via the VGM (Vista Gateway Module)
- 9 hardwired zones built-in
- Supports 4146 dual-led key switch
- Supports both two and four-wire smoke detectors
- Expand up to 128 zones with 5800 wireless and/or V-Plex™ polling loop
- 512 event log that can be viewed from the keypad, printed from the panel (requires a 4100SM and a serial printer or a APM with either a serial or parallel printer) or viewed from the Compass downloader
- Supports both dip switch and serial number polling loop devices (serial devices are recommended)
- 150 user codes (among all partitions) with eight levels of authority
- Supports 4285/4286 phone access module
- Up to 32 keypad macros which combine up to 32 keystrokes, simplifying use of the system
- Cross zoning (up to 4 pairs)
- Scheduling and relay control
- Supports FSA-8 and FSA-24 Fire System Annunciation modules which will allow someone to quickly identify a zone in alarm
- Up to 96 outputs (4204, FSA, or VPlex relay)
- SIA false alarm prevention features
- Supports the VistaView-100 CCTV switcher
VistaView-100 will accept up to four video inputs and two video outputs (monitor and/or recorder)

- Includes E2 programming method, simplifying keypad programming for experienced technicians
- Provides the option to have trouble and supervisory conditions automatically clear from the keypad display when the condition restores without entry of the user code + off

Zone Features:

- Max Zones: 128 with V-Plex™ and wireless expansion
- Standard Zones-9 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
 - Four-wire smoke detectors on zones 2-8

Patented V-plex™ Two-Way Global Polling Technology:

- Up to 119 additional zones on a single pair of wires
- 128mA available on the loop
- 8 times faster than standard multiplex polling loop
- Up to 6400' (total wire)

V-plex™ Serial Numbered Devices Include:

- 998MX passive infrared with look-down lens
- 4101SN one-zone + one-relay module
- 4190SN two-zone module
- 4192SDM photoelectric smoke with high/low sensitivity test
- 4192SDTM photoelectric+135 deg. heat with high/low sensitivity test
- 4192CPM ionization detector with high/low sensitivity test
- 4193SN two-zone expander
- 4208U eight-zone module
- 4209U Group Zoning Module - two/four zones
- 4278EX-SN passive infrared
- 4293SN one-zone expander
- 4939SN surface mount door contact
- 4944SN recessed mount door contact
- 4959SN overhead door contact
- 5192SD photoelectric smoke with high/low sensitivity test
- 5192SDT photoelectric+135 deg. heat with high/low sensitivity test
- 5192CP ionization detector with high/low sensitivity test
- 4297 loop extender and isolation module

5800 Series Wireless Expansion

Zones 001-128 can be wireless

- 5881L/5881ENL for up to eight wireless zones
- 5881M/5881ENM for up to 16 wireless zones
- 5881H/5881ENH for up to 128 wireless zones
- 5881EH/5881ENHC for up to 128 wireless zones

(UL listed, 5881ENHC includes front and back tamper switches)

- Up to two receivers can be used for redundant supervision or to increase the area of coverage (nominal range with one receiver is 200')
- All transmitters are supervised for low battery and check-in (except certain portable devices)
- All transmitters have tampered cases (except certain portable devices)
- All transmitters use lithium batteries for longer life (up to seven years!*)

Transmitters Include:

- 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 2-zone, miniature
- 5816TEMP low temp sensor
- 5817 three-zone
- 5817CB commercial fire/burglary transmitter
- 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
- 5869 commercial hold-up switch w/transmitter
- 5890 passive infrared detector
- 5890PI passive infrared detector with "Pet Immune" technology

Addressable Devices

The FA1660C supports up to 16 of these addressable devices:

Keypads

FA560KP

- 2x16 alpha display, backlit integral 85dB sounder
- Backlit keys
- A, B, C, D, macro/panic keys
- Built-in user manual

Relay Modules

- 4204 relay module
- Four programmable SPDT relays rated 2A @ 12volts
- May be controlled by an event, a time schedule, or by a wireless button device
- FSA-8 and FSA-24 Fire System Annunciation Module

Wireless Receivers

- 5800 Series
- 5881L/5881ENL for up to eight transmitters
- 5881M/5881ENM for up to 16 transmitters
- 5881H/5881ENH for up to 128 transmitters
- 5881EH/5881ENHC for up to 128 transmitters (UL)

4285/4286 Phone Access Module

- Allows the user to access the security system via any touch tone phone
- Get system status
- Arm and disarm
- Control relay outputs

The 4286 also provides a speaker output and thermostat control.

Two-Wire Conventional Smoke Detectors

System Sensor 1100 Series Ionization

System Sensor 2100 Series Photoelectric

System Sensor 2400 Series Photoelectric

Four-Wire Conventional Smoke Detectors

System Sensor 1412 Series Ionization

System Sensor 2112/24 Series Photoelectric

V-Plex Smoke Detectors

System Sensor 4192 Series

System Sensor 5192 Series

Accessory Equipment

4146: Keyswitch, 2-LED plate

FA5140MPS-1: Pull-station, ADA compliant, key reset

5140MPS-BB: Surface back box for above pull station

* Battery life can be affected by many things, including frequency of use, temperature, humidity and age of the battery upon installation. Use only recommended batteries.

**Battery independent

***All outputs are power limited

FA1660C Electrical Specifications

Voltage input: 16.5 VAC, 40VA from 1361 or 4300 plug-in transformer

Auxiliary power: 12 VDC, 750ma

Alarm output power:** 12 VDC,1.7amps

Battery backup: One 12vdc, 4ah min; two 12 vdc, 7ah max.

Overload protection:*** Battery input, auxiliary power and alarm output are protected using PTC (Positive Temperature Coefficient) circuit breakers.

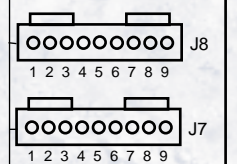
WARNING: OWNER'S INSTRUCTION NOTICE NOT TO BE REMOVED

- NOTES:**
- Zone 1 may be selected for EOLR supervised or normally closed (no EOLR) operation via cut jumper. (Cut red jumper for normally closed operation. Do not cut for Fire Usage). Zones 2-8 may be selected for either operation via program field *41.
 - Zone 1 supports 2-wire smoke detectors. See Installation and Setup Guide for recommended type and maximum number of detectors supported.
 - Zone 7 may be used for remote keyswitch arming/disarming. See Installation and Setup Guide for wiring instructions.
 - Zone 8 supports 2-wire latching type glass break detectors. See Installation and Setup Guide for recommended type and maximum number of detectors supported.
 - Cut blue jumper to disable supervision of alarm sounder output. Leave jumper intact to supervise output. (See Installation and Setup Guide for Programming and Wiring Instructions).
 - Zone 9 may be used for RS232 input.

WEEKLY TESTING IS REQUIRED TO ENSURE PROPER OPERATION OF THIS SYSTEM.

- J7 Header**
- Not Used
 - Ground-
 - Out 1 (Ground Start)
 - Ground-
 - Out 2 (fire)
 - Ground-
 - Out 3 (burg/aud. panic)
 - Ground
 - Out 4 (silent panic/duress)
- J8 Header**
- In 2 (Printer DTR)
 - Ground
 - In 3 (4300 sync)
 - In 4 (4300 sync)
 - Ground
 - Out 5 (4300 data)
 - Out 6 (Printer RXD)
 - Ground
 - Ground
- Optional programming:**
 Out 1: Smoke Detector Reset
 Out 2: Armed LED
 Out 4: Ready LED
- Ratings for Out 1:**
 Active: 10VDC-13.8VDC through 4k OHMS
 Not Active: 100 OHMS to ground
- Ratings for out 2-4:**
 Active: 10VDC-13.8VDC through 5k OHMS
 Not Active: 1k OHMS to ground
- (Refer to Installation and Setup Guide for information concerning Direct Wire Downloading and printer connections.)

MAKE CONNECTIONS USING
 No. 4142TR CABLE



EARTH GROUND
 Connect to good earth ground to maintain immunity to transients. See Instructions for proper grounding.

DOC LOAD NO.: 5

WARNING: TO PREVENT RISK OF ELECTRICAL SHOCK, DISCONNECT TELCO JACK BEFORE SERVICING THIS PANEL.

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

COMPLIES WITH FCC RULES, PART 68
 FCC REGISTRATION NO. AC398U-68192-AL-E
 RINGER EQUIVALENCE: 0.7B

Blue Jumper (note 5)

BATTERY TABS
 RED (+)
 BLK (-)

Connect to 12VDC, 4AH or 12VDC, 7AH

GEL CELL BATTERY

CHARGING VOLTAGE 13.7VDC

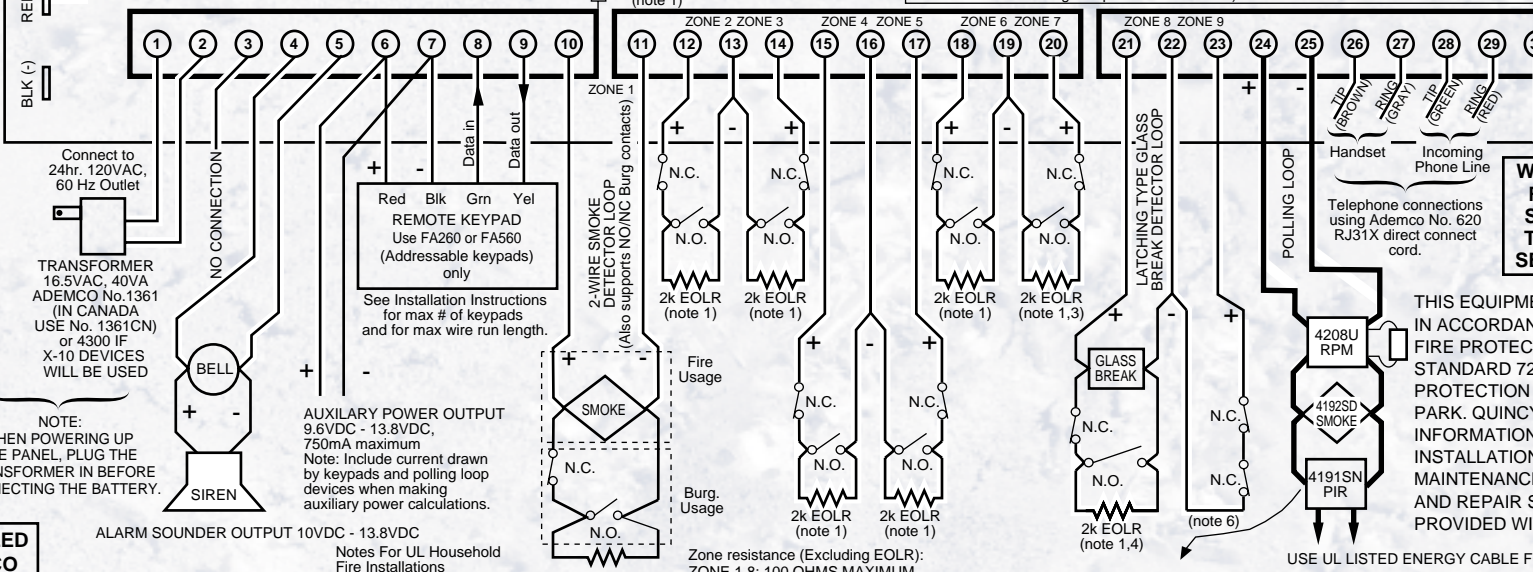
See Installation and Setup Guide for required capacity

Replace every 3 years

TRANSFORMER 16.5VAC, 40VA ADEMCO No.1361 (IN CANADA USE No. 1361CN) or 4300 IF X-10 DEVICES WILL BE USED

Connect to 24hr. 120VAC, 60 Hz Outlet

NO CONNECTION



ASSEMBLED IN MEXICO

ALL CIRCUITS ARE POWER LIMITED.

FA1660C SUMMARY OF CONNECTIONS

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

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.