411UDAC

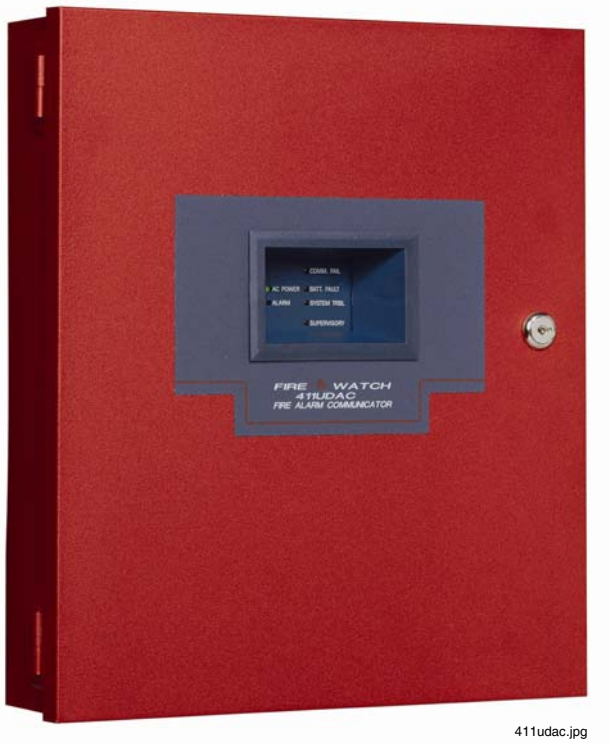
Fire Alarm Communicator

NOTIFIER® by Honeywell

Miscellaneous

General

The Fire-Watch 411UDAC is a compact, multifaceted, stand-alone or slave Fire Alarm Communicator designed for a variety of fire and non-fire applications. It provides four channels (inputs) that accept waterflow devices, two- and four-wire smoke detectors, pull stations, and other normally-open contact devices. The 411UDAC is a cost-effective solution for applications that require an existing (or new) Fire Alarm Control or Security Panel to transmit system status to an off-site monitoring facility for Central or Remote Station compliance. Due to its extremely flexible programming options, the 411UDAC is also ideal for use as a stand-alone unit to monitor: sprinkler systems for waterflow and supervisory conditions; processes (i.e., water level, gas detection, loss of air flow); and normally-open contact devices. With fifteen selectable transmission formats, including Ademco Contact ID, compatibility with virtually all Digital Alarm Communicator Receivers (DACR) is ensured. Programming can be accomplished on-site with a hand-held programmer (PRO-411), or remotely utilizing the optional PK-411UD Windows®-based remote upload/download software package. The PK-411UD upload/download software also permits system interrogation and revision from a remote site. The PK-411UD is part of the PK-CD utility.



411udac.jpg

Features

- Four supervised monitoring channels (inputs):
- Three fixed Style B (Class B) and one Style A (Class A) or Style B (Class B).
- *Inputs may be individually programmed for stand-alone applications, or when monitoring a host control panel, for:*
  - Two- and four-wire smoke detectors (Inputs 1 and 3).
  - Pull station.
  - Normally-Open contacts.
  - Host panel trouble (slave mode).
  - Supervisory.
  - Supervisory (autoresettable).
  - Waterflow (silenceable).
  - Waterflow (non-silenceable).
  - Process monitoring.
  - Process monitoring (autoresettable).
- One Style Y (Class B) Notification Appliance (bell)
- Circuit (NAC).
- 1.0 Amp notification appliance power.
- Coded (temporal) notification appliance (bell, signal) circuit.
- 12 VDC operation.
- Capable of 60 hours of standby.
- *Seven individual LEDs; six visible through door:*
  - AC Power.
  - System Trouble.
  - System Alarm.
  - Supervisory.
  - Communication Fail.
  - Battery Trouble.
  - Earth Fault (not visible with door closed).
- *Dual telephone lines:*
  - Dual telephone line voltage detect.
  - Alternating phone lines for 24-hour test messages (programmable).
- Industry-first, UL recognized, “dialer runaway” prevention feature.
- New long-distance Carrier Access Code (CAC) compliant, accepting 20-digit central station and service terminal telephone numbers.
- Industry-first, user-selectable restoral methods.
- Fully programmable transmittal codes for fire and non-fire (e.g., process monitoring) applications.
- *Capable of transmitting the following DACT information, in addition to vital system status of the host control panel:*
  - DACT troubles.
  - Telephone line 1 and 2 voltage fault.
  - Primary or Secondary Central Station communication fault.
  - System off-normal.
  - 24-hour normal test.
  - 24-hour abnormal test.
- Includes 15 popular communication formats, including the widely used Ademco Contact ID format, ensuring compatibility with virtually all DACRs.
- Local piezo sounder with separate and distinct sounds for various conditions.
- Acknowledge/System Silence and Reset switches.

- Alarm verification.
- Signal silence inhibit.
- Autosilence.
- Trouble reminder (with 24-hour resound).
- Real-time clock.
- *OPTIONAL: Two Form-C relays (411 RK), fully programmable to activate for the following conditions:*
  - – Fire alarm.
  - – Process monitoring (autoresettable).
  - – Host control panel trouble.
  - – Total communication trouble.
  - – Fire supervisory (latching).
  - – Fire supervisory (autoresettable).
  - – DACT trouble (factory default for relay).
  - – Process monitoring.
- Optional PK-411UD Remote Upload/Download Kit.
- Optional DP-2 Dress Panel (required for Canadian applications).

Host Panel Compatibility

Host panels must include AC Fail Delay option to meet NFPA Central Station Requirements. The following panels include this feature: SFP-2402, SFP-2404, RP-2001, RP-2002.

Housing

The cabinet is red and measures 14.5" (36.83 cm) high x 12.5" (31.75 cm) wide and 2.875" (7.303 cm) deep. It provides space for up to two 7 A.H. batteries (order batteries separately). An optional dress panel, DP-2 (required for Canadian installations), which mounts inside the cabinet, is available. The dress panel restricts access to the system wiring but allows access to the membrane switch panel.

Phone Line Connections

Two modular phone connections are provided on the 411UDAC, accessible by simply opening the door. They provide connections for two separate telephone lines using standard RJ31X or RJ38X jacks. Both telephone lines are constantly supervised for proper voltage and current. If one phone line goes into fault, and the remaining is operational, a report is sent to the central or remote station via the operable phone line.

Communications Formats

0. 4+1 Ademco Express Standard, DTMF, 1400/2300 ACK.
1. 4+2 Ademco Express Standard, DTMF, 1400/2300 ACK.
2. 3+1 Standard 1800 Hz Carrier, 2300 Hz ACK.
3. 3+1 Expanded 1800 Hz Carrier, 2300 Hz ACK.
4. 3+1 Standard 1900 Hz Carrier, 1400 Hz ACK.
5. 3+1 Expanded 1900 Hz Carrier, 1400 Hz ACK.
6. 4+1 Standard 1800 Hz Carrier, 2300 Hz ACK.
7. 4+1 Expanded 1800 Hz Carrier, 2300 Hz ACK.
8. 4+1 Standard 1900 Hz Carrier, 1400 Hz ACK.
9. 4+1 Expanded 1900 Hz Carrier, 1400 Hz ACK.
A. 4+2 Standard 1800 Hz Carrier, 2300 Hz ACK.
B. B: 4+2 Expanded 1800 Hz Carrier, 2300 Hz ACK.
C. C: 4+2 Standard 1900 Hz Carrier, 1400 Hz ACK.
D. D: 4+2 Expanded 1900 Hz Carrier, 1400 Hz ACK.
E. E: Contact ID, DTMF, 1400/2300 ACK.
F. F: Future Use.

Specifications

This digital communicator/transmitter has been designed to comply with standards set forth by the following regulatory agencies:

- Underwriters Laboratories, Inc.
- NFPA 72 National Fire Alarm Code.
- CAN/ULC: S527 - M87 Standard for Control Units for Fire Alarm Systems.

FCC Registration: OAAUSA-25431-AL-E.

Ringer Equivalence: 0.5 B.

For Canadian Applications:

IC Certificate Number: 2132 9028 A.

Ringer Equivalence Number (REN): 0.2.

PROGRAMMING: An optional digital programming unit with a keypad, model PRO-411, is available for programming the 411UDAC. It is also used for troubleshooting and accessing the various modes of operation. Off-site programming can be accomplished with the optional PK-411UD. The PK-411UD enables a user to program the 411UDAC off-site via the public switched telephone network using any personal computer with Windows 98 or higher or Windows 95 and a 1200-baud Hayes® compatible modem.

General Specifications:

AC Power (TB3)**:** 120 VAC, 60 Hz, 0.3 amps. Wire size: minimum 14 AWG (2.00 mm²) with 600 V insulation.

Battery (Lead-Acid Only) (J3)**:** Maximum charging circuit: normal flat charge 13.7 V @ 0.6 amps. Maximum charger capacity: 14 A.H. battery.

Channels/Inputs (TB2 Terminals 1 through 10)**:**

- Programmable Channels 1 through 4.
- Power-limited circuitry.
- Fully supervised (monitored for opens, shorts, and earth faults).
- Normal operating voltage: 12.0 VDC (ripple 100 mV maximum).
- End-of-line resistor: 2.2K ohms, 1/2 watt (part # 27070, UL listed).

Operation for each channel:

- Channel/Input 1, Style B (Class B) two-wire smoke detector input and Channel/Input 3, Style B (Class B) or Style D (Class A) two-wire smoke detector or waterflow input.
- Channel/Input 2 and Channel/Input 4 Style B (Class B) contact closure input.
- Refer to Device Compatibility Document for listed compatible devices.

Notification Appliance Circuit (TB4 Terminals 1[+] and 2[–])**:**

- Style Y (Class B) circuit.
- Power-limited and supervised (monitored for opens, shorts, and earth fault).
- Operating voltage nominal 13.8 VDC.
- Current for all external devices: 1.0 amp.
- End-of-line resistor: 2.2K ohms, 1/2 watt (P/N 27070).
- Refer to Device Compatibility Document for listed compatible devices.

Two Optional Form-C Relays (TB1 Terminals 1 through 6)**:** *Operating voltage:* nominal 12 VDC. *Contact rating:* 2.0 amps @ 30 VDC (resistive), or 0.5 amps @ 30 VAC.

12 VDC Resettable Power (TB4 Terminals 3[+] and 4[–])**:**

- Operating voltage: nominal 12 volts.

- Up to 200 mA available to power four-wire smoke detectors.
- Power-limited and supervised circuitry.
- Recommended maximum standby current: 50 mA.

NOTE: *1) For power supply and battery calculations, refer to the 411UDAC manual.*

OPERATING POWER: *Primary Power Source (AC):* AC power connections are made inside the 411UDAC cabinet. The primary power source is 120 VAC, 60 Hz, 0.3 amps.

Secondary Power Source (Batteries)**:** One 12-volt battery can provide power for up to 7 A.H. applications. Two 12-volt, 7 A.H. batteries (in parallel) can provide power for up to 14 A.H. applications (60 hour standby). The battery charger is current-limited and capable of recharging sealed lead-acid-type batteries. The charger shuts off when the system is in alarm. Refer to the battery calculations table in the 411UDAC manual to determine the correct battery rating.

TRANSFORMER ASSEMBLY: One transformer is shipped in the same carton as the cabinet and main circuit board but not mounted in the cabinet. The transformer should be installed before the cabinet is mounted to the wall.

AUXILIARY RELAY: Two optional Form-C relays (411RK) are available for installation on the 411UDAC main circuit board. The relays are programmable for activation on fire alarm, host panel trouble, fire supervisory, process monitoring, total communications failure, and DACT trouble. *Relay contact rating:* 2.0 amps @ 30 VDC (resistive); or 0.5 amps @ 30 VAC (resistive).

Agency Listings And Approvals

These listings and approvals apply to the modules specified in this document. In some cases, certain modules or applications may not be listed by certain approval agencies, or listing may be in process. Consult factory for latest listing status.

- **UL Listed:** S635
- **ULC:** S2424
- **MEA Listed:** 328-94-E Vol. 6
- **CSFM:** 7300-0075:0174
- **FDNY:** COA #6038 (NFS2-640), COA #6058 (NFS2-3030)
-

Product Line Information

Model	Description
411UDAC	Four-channel, dual-line, stand-alone or slave Fire Alarm Communicator. Includes housing, operating and programming instructions. Use PRO-411 (below) hand-held DACT programmer for local programming; or PK-411UD (below) Windows-based programming software for remote programming and real-time diagnostics.
DP-2	Dead-front dress panel, required for Canadian applications.
PRO-411	Optional hand-held DACT programmer which can be used to troubleshoot and program the 411UDAC, as well as access the various modes of operation.
PK-CD	Contains PK-411UD programming software. The PK-411UD enables a user to program the 411UDAC off-site via the public switched telephone network using a personal computer.
411RK	Optional dry auxiliary Form-C relays, with contacts rated for 2.0 amps @ 30 VDC (resistive) or 0.5 amps @ 30 VAC (resistive). Optional use requires two relays.
MCBL-7	DACT phone cord, seven feet long (two required).
PS-1270	Battery, 12-volt, 7.0 AH (one required for 24-hour systems; two [wired in parallel] required for 60-hour systems).

	Format # (Addresses 16 & 42)	Ademco 685 (1)	Silent Knight 9000	ITI CS-4000 (3)	FBI CP220FB	Osborne Hoffman Models 1&2	Radionics 6000/6500 (5)	Sescoa 3000R (7)	Sur-Gard MLR-2 (9)
0	4+1 Ademco Express	X			X				X
1	4+2 Ademco Express	X			X	X(8)		X	X
2	3+1/Standard/1800/2300	X	X(2)	X	X(4)	X	X(5,6)	X	X
3	3+1/Expanded/1800/2300	X	X(2)	X	X(4)	X		X	X
4	3+1/Standard/1900/1400	X	X(2)		X(4)	X		X	X
5	3+1/Expanded/1900/1400	X	X(2)		X(4)	X		X	X
6	4+1/Standard/1800/2300	X	X(2)	X	X(4)	X	X(5)	X	X
7	4+1/Expanded/1800/2300	X	X(2)	X	X(4)	X	X(5)	X	X
8	4+1/Standard/1900/1400	X	X(2)		X(4)	X		X	X
9	4+1/Expanded/1900/1400	X	X(2)		X(4)	X		X	X
A	4+2/Standard/1800/2300	X	X(2)	X	X(4)	X	X(5)	X	X
B	4+2/Expanded/1800/2300	X	X(2)		X(4)	X		X	X
C	4+2/Standard/1900/1400	X	X(2)		X(4)	X		X	X
D	4+2/Expanded/1900/1400	X	X(2)		X(4)	X		X	X
E	Ademco Contact ID	X			X	X			X

(1) With 685-8 Line Card with Rev. 4.4d software.
(2) With 9002 Line Card Rev. 9035 software, or 9032 Line Card with 9326A software.
(3) Rev. 4.0 software.
(4) FBI CP220FB Rec-11 Line Card with Rev. 2.6 software and a memory card with Rev. 3.8 software.
(5) Model 6500 with Rev. 600 software.
(6) Model 6000 with Rev. 204 software.
(7) With Rev. B control card at Rev. 1.4 software and Rev. C line card at Rev. 1.5 software.
(8) Model 2 only.
(9) Version 1.62 software.

ISO 9001 CERTIFIED
ENGINEERING & MANUFACTURING
QUALITY SYSTEMS

This document is not intended to be used for installation purposes.
We try to keep our product information up-to-date and accurate.
We cannot cover all specific applications or anticipate all requirements.
All specifications are subject to change without notice.

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WM TAO & ASSOCIATES
CONSULTING ENGINEERS

Shop Drawing Submittal Review

Transmitted To: Cannon Design

Date: January 5, 2017

Attention: **stl-cac@cannondesign.com**

Contact Person / WTA Field Inspector: Patrick Garner

Project Name: Webster University-**ISB**

Reviewed by: Joe Krussel

Project No. WT 14127.01

☐ UPS ☐ Courier ☒ **Email**

Copies	No.	Description
1 PDF	267100E02	(Submittal No.'s:) (R&B CxSRC)
		(Cannon #267100-004) - (Paric #15051-0400) – ~~(WES #607)~~
		➢ **Fire Alarm Product Data**

Remarks:

c: **Kelvin Patel**
Kpatel@cannondesign.com

☒ **Furnish as Submitted** ☐ Furnish as Noted

☐ Rejected ☐ Revise & Resubmit

☐ Reviewed ☐

Corrections or comments made on shop drawings during this review do not relieve contractor from compliance with requirements of drawings and specifications. This check is only for review of general conformance with the design concept of project and general compliance with information given in contract documents. Contractor is responsible for: confirming and correlating all quantities and dimensions; selecting fabrication processes and techniques of construction; coordinating his work with that of all other trades; and performing his work in a safe and satisfactory manner.

14127.01 - 267100 E02
JTK TO REVIEW
12/27/16

WTASHOP - Webster ISB - 26 7100-003 and 004

From: STL-CAC <STL-CAC@CANNONDESIGN.COM>
To: 'Patrick Garner' <pgarner@wmtao.com>, "WTASHOP (WTASHOP@wmtao.com)" <WTA...
Date: 12/27/2016 11:31 AM
Subject: Webster ISB - 26 7100-003 and 004
Cc: "Patel, Kelvin" <kpatel@CANNONDESIGN.COM>
Attachments: 267100-003 Fire Alarm Shop Drawings.pdf; 267100-004 Fire Alarm Product Data.pdf

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Attached for review.

Melissa Pirtle

CANNONDESIGN

1100 Clark Ave
St. Louis, Missouri 63102
T 314.425.8797
cannondesign.com

CANNONDESIGN

SUBMITTAL IDENTIFICATION SHEET

To be completed by Contractor/CM

WEBSTER UNIVERSITY ISB
PROJECT NAME

8274 BIG BEND BLVD
ADDRESS

NUMBER

WEBSTER UNIVERSITY
OWNER

CANNON DESIGN
ARCHITECT / ENGINEER

Joe Voypick
SUBMITTED BY

267100-004
CONTRACTOR / CM SUBMITTAL NO.

CANNON DESIGN SUBMITTAL NO.

DRAWING / DETAIL REFERENCE

267100
SPECIFICATION SECTION / PARAGRAPH

Tech Electronics
MANUFACTURER / SUPPLIER

ITEM / PRODUCT ID

REQUIRED DATE

PRIORITY

◯ CRITICAL

ITEM BEING SUBMITTED (check only one)

◯ Shop Drawings
◯ Samples
(_____ copies)
◯ LEED Submittal
◯ Certification / Qualifications
◯ Record Documents
◉ Product Data
◯ Coordination Drawing
◯ Calculations
◯ Schedules
◯ O&M Manuals
◯ Other _____

ITEM BEING SUBMITTED FOR (check only one)

◉ Action
◯ Information Only
◯ Record

REMARKS OR DEVIATIONS

Physical Copies Given to Kelvin Paten in OAC meeting 12/20/16

CONTRACTOR / CM CERTIFICATION
(SUBMITTALS NOT CERTIFIED WILL BE RETURNED WITHOUT REVIEW)

PARIC

PARIC CORPORATION
SUBMITTAL STAMP

THIS SHOP DRAWING HAS BEEN REVIEWED BY PARIC CORPORATION

Subcontractor remains responsible for dimensions, quantities, coordination with other trades and compliance with contract documents.

By:
Devin D. Gates

Joe Voypick
REVIEWED BY

12/20/16
DATE

To be completed by Reviewer

26 7100-004
CANNON DESIGN SUBMITTAL NUMBER

12/20/16
RECEIVED DATE

◯ A. No Exceptions Taken
No further review of submittal is required.

◯ B. Make Corrections Noted
Incorporate corrections in work; resubmission is not required.

◯ C. Revise and Resubmit
Revise as noted, and resubmit for review.

◯ D. Rejected
Submittal is not in compliance with Contract Documents; provide new submittal.

◯ E. For Record / Information Only
Submittal was reviewed for Record / Information purposes only.

◯ F. Not Required for Review
Submittal is not required by Contract Documents and has not been reviewed.

Review is for conformance with the design concept of this project and for general compliance with contract documents. Contractor is responsible for quantities, dimensions and compliance with contract documents and for information that pertains to fabrication processes, construction techniques and coordination of this work with all trades which will be affected thereby. This review is null and void if submittal deviates from contract documents and does not indicate or note deviations.

A/E COMMENTS

◯ See attached sheet(s) for additional comments

REVIEWED BY

DATE

77 Westport Plaza
Suite 250
St. Louis, MO 63146

TRANSMITTAL

No. 15051-0400

Paric Corporation

PROJECT: 15051-Webster University Interdisciplinary Science Building

DATE: 12/20/2016

TO: Cannon Design
1100 Clark Ave
St Louis MO 63102

Fax;
314-241-2203

RE: Fire Alarm Product Data

ATTN: Kelvin Patel

JOB: 15051

WE ARE SENDING:	SUBMITTED FOR:	ACTION TAKEN:
☐ Shop Drawings	☑ Approval	☐ Approved as Submitted
☐ Letter	☐ Your Use	☐ Approved as Noted
☐ Prints	☐ As Requested	☐ Returned After Loan
☐ Change Order	☐ Review and Comment	☐ Resubmit
☐ Plans		☐ Submit
☐ Samples	**SENT VIA:**	☐ Returned
☐ Specifications	☐ Attached	☐ Returned for Corrections
☑ Other: Product Data	☐ Separate Cover Via:	☐ Due Date:

Item	*Package*	*Code*	*Rev.*	*Copies*	*Date*	*Description*	*Status*
Submittal		267100-004	1		12/20/2016	Fire Alarm Product Data	Submitted

NOTES:

CC:

Signed: _____

Devin Gates

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For information, Availability & Pricing of CABLE Please Call:

John Idoux

(314)951-1718

For All Other Information on This Project, Please Call:

Keith Hinote

(314) 951-1743

Tech Electronics, Inc.

6437 Manchester Ave., St. Louis, MO 63139 www.techelectronics.com

Offices & Representatives in Other Cities