

411 Series

Slave Digital Alarm Communicator Transmitters



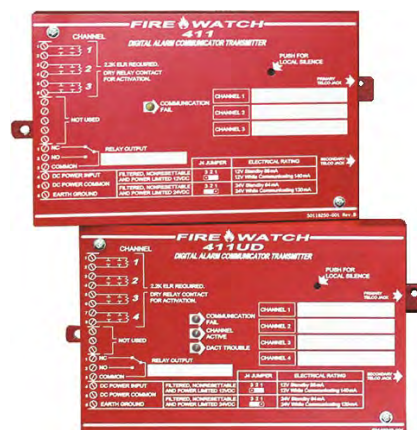
Control/Communicators

General

The Fire•Watch 411 Series DACTs are compact, multifaceted, slave Digital Alarm Communicator Transmitters designed for a variety of fire, security, and non-fire applications. The series features the 411 and 411UD, which provide three and four monitoring channels (inputs) respectively. These slave DACTs are a solution for applications that require an existing (or new) fire alarm control panel (FACP) to transmit system status to an off-site monitoring facility for Central or Remote Station compliance. Due to extremely flexible programming options, the 411 Series slave DACTs are also ideal for monitoring non-fire and security control panels. 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 (411UD only) using the PK-411UD programming utility. This Windows®-based remote upload/download software package permits system interrogation and revision from a remote site.

Features

- Three (411) or four (411UD) monitoring channels (inputs)
- Inputs may be individually programmed to monitor the host control panel for:
 - Fire Alarm
 - Fire Trouble
 - Fire Supervisory
 - Process Monitoring
 - AC Power Loss
 - Security Alarm
 - Other (Fire and Non-Fire Events)
- Trigger inputs require a contact closure for activation
- 12- or 24-VDC operation, jumper-selectable
- Industry-first, UL recognized, “dialer-runaway” prevention feature
- Dual-line, rotary or touch-tone-dial DACT interfaces to public switched telephone network (leased phone lines are not required)
- Includes 15 reporting formats, including the popular ADEMCO Contact ID format
- 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
- Long-distance Carrier Access Code (CAC) compliant, accepting up to 20-digit Central Station telephone numbers
- Fully programmable transmittal codes for fire, security, process monitoring, and others
- Field-programmable with PRO-411 hand-held programmer



- Programmable from remote site with optional PK-411UD programming software (model 411UD only)
- View 411 Series status off-site in real time, with optional PK-411UD programming software, without ever compromising monitoring protection at the protected premises (model 411UD only)
- Integral piezo sounder with local silence switch
- One Form-C relay, fully programmable
- Complies with NFPA 72 (Central Station and Remote Station [DACT only - not polarity reversal] Fire Alarm Systems)
- Extremely compact enclosure, measuring only 6.841" (17.376 cm) W x 4.595" (11.671 cm) H x 1.0" (2.54 cm) D

Host Panel Compatibility

Host panels must include AC Fail Delay option to meet NFPA Central Station Requirements. Panels with this feature include MRP-2001, MRP-2002, MS-2, and MS-4.

Housing

The 411 Series DACTs are fully enclosed in a compact housing measuring only 6.841" (17.376 cm) W x 4.595" (11.671 cm) H x 1.0" (2.54 cm) D. The housing enclosure consists of an aluminum backbox painted red with a matching cover secured by two captive screws. The overlay includes large areas to independently mark programming options for the three or four channels (inputs), relay, and also includes printed terminal and diagnostic LED designations.

Phone Line Connections

Two modular phone connections on the 411 Series are accessible with the cover in place and provide connections for two separate telephone lines using standard RJ31X or RJ38X jacks. Both telephone lines are constantly supervised for proper operation and integrity. If one phone line goes into fault while the other is working, a report is sent to the central or remote station.

Diagnostic LEDs

- Communication Fail (visible with front cover in place).
- DACT Trouble (visible with front cover in place) (411UD).

- Channel Active (visible with front cover in place) (411UD).
- Primary Phone Line (PH1) Active (411UD).
- Secondary Phone Line (PH2) Active (411UD).

Specifications

Listings and Approvals:

- NFPA 72: Central Station Fire Alarm Systems.
- NFPA 72: Remote Station Fire Alarm Systems.
- UL Standard 1635: Digital Alarm Communicator/Transmitters.
- UL Standard 864: Control Units for Fire Alarm Systems.

FCC Registration: 1W6AL04B411UDAC. Ringer Equivalence: 0.4 B.

Programming: A digital programming unit with a keypad, model PRO-411, is available for programming the 411 Series.

Operating Power: The circuit board operates on filtered 12 VDC. The configuration of Jumper J4 determines whether 12 VDC power is to be supplied directly to the circuit board, or 24 VDC power is to be supplied and then internally regulated down to 12 VDC.

DC Power: TB1 Terminals 4(+) and 5(-); Terminal 6 is Earth Ground.

- J4 Jumper shorted on pins 2 and 3 - Filtered, non-resettable and power-limited 24 VDC (nominal) power must be supplied at TB1 Terminals 4(+) and 5(-). UL-listed operating range is 17 to 28 VDC. Current requirements are 64 mA in standby and 120 mA* while communicating.
- J4 Jumper shorted on pins 1 and 2 - Filtered, non-resettable and power-limited 12 VDC (nominal) power must be supplied at TB1 Terminals 4(+) and 5(-). UL-listed operating range is 9.8 to 14 VDC. Current requirements are 88 mA in standby and 140 mA* while communicating.

***NOTE:** A maximum of 200 mA is possible with all input channels shorted, the 411/411UD communicating, the Programmer connected, and Lamp Test active.

Channels/Inputs:**

- Programmable Channels 1 through 3 (411) or 4 (411UD).
- Power-limited circuitry.
- Operation: All channels NFPA Style B (Class B). Requires Normally Open contact to trigger.

- Normal operating voltage: 12 VDC.
 - Alarm current: 2.68 mA.
 - End-of-line resistor: 2.2K ohms, 1/2 watt (P/N 27070).
 - Short-circuit current: 3.9 mA per channel/input.
 - Restricted to 20 feet (6 m) in conduit and in the same room
- **NOTE:** Channels/inputs do NOT support two-wire smoke detectors.

Form-C Relay:

- Contact rating: 2.0 amps @ 30 VDC (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:** S2424.
- **MEA Listed:** 328-94-E Vol. III (411UD); 328-94-E Vol. IV (411).
- **CSFM:** 7300-0075:0174.

Product Line Information

411: Three-channel, dual-line, slave Digital Alarm Communicator Transmitter with Form-C programmable relay and silence switch. Includes housing, operating and programming instructions. Requires PRO-411 hand-held DACT programmer for local programming.

411UD: Same as above with four input channels and remote upload/download capability. Requires PRO-411 hand-held DACT programmer for local programming or PK-411UD Windows-based programming software for remote programming and real-time diagnostics.

PRO-411: Hand-held programmer for local programming of 411 Series DACTs.

PK-411UD: 411UD programming software; available for download at www.firelite.com or ships on PK-CD.

PK-CD: Remote upload/download, Windows®-compatible programming software kit (for use with 411UD only).

MCBL-7: DACT phone cord, seven feet long (two required).

NOTE: For information about 411UDAC, see DF-60796.