

### Panel Mounted Digital Alarm Communicating Transmitters with Serial Communications (SDACT)

#### Features

##### UL 864 listed per NFPA 72, National Fire Alarm and Signaling Code, for Central Station Service:

- Operation is listed to UL Standard 1459 Telephone Equipment
- Refer to table on page 2 for additional information
- Registered to FCC Part 68

##### Dual telephone line interface:

- Requires Data Certified POTS lines
- Also compatible with DACT to Ethernet connection interfaces (refer to compatibility list on page 2)

##### Mounts internally to Simplex® models:

- 4007ES, 4010, 4010ES, 4100ES, and 4100U
- For Network applications, select a 4100ES or 4100U node for Network SDACT status reporting when available

##### Provides specific building event information:

- Communicates point status changes, phone line status, and other off-normal information
- Reports up to ten events per phone call

##### Provides programmable control for:

- Automatic 6 hour test
- Power fail report delay

##### SDACT status indicators include:

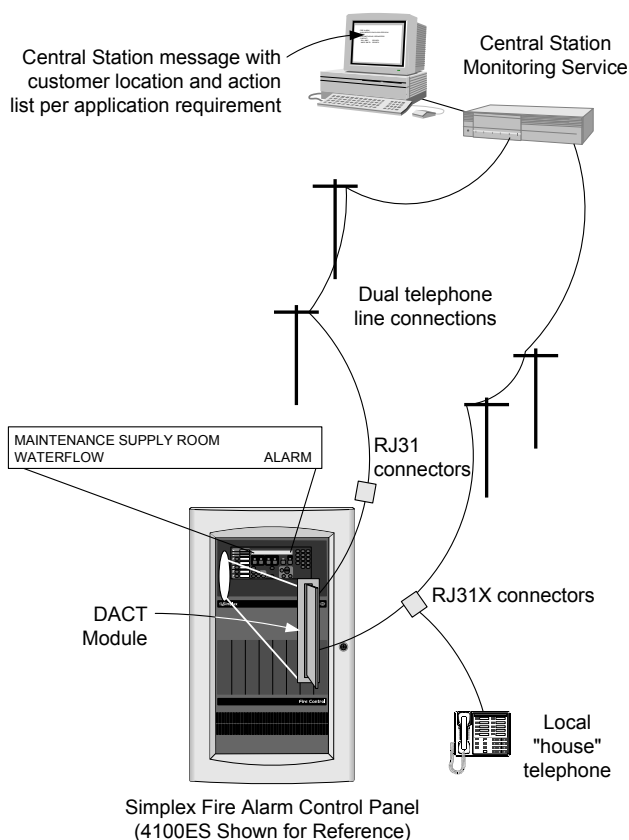
- Panel LCD indicates off-normal status
- Module LEDs provide service diagnostics

#### Description

**Serial DACT.** Simplex serial digital alarm communicating transmitter (SDACT) modules monitor the status of the host fire alarm control panel and its connections to the Central Station monitoring location. When status changes require information to be reported, the SDACT provides detailed messages that can assist the Central Station in accurately implementing the required response. Typical information reports include alarms, troubles, and supervisory conditions. Model series 4007ES, 4010, 4010ES, 4100ES, and 4100U provide specific point information.

SDACT modules directly communicate with the fire alarm control panel CPU and are custom programmed for the specific requirements of the Central Station and the connected fire alarm control panel.

\* Refer to individual fire alarm control panel data sheets and receiving DACR product information for additional listing status. Contact your local Simplex product supplier for additional information. Listings and approvals under Simplex Time Recorder Co. are the property of Tyco Fire Protection Products.



SDACT Application Diagram

#### Available Reporting Formats

**Contact ID (CID).** CID is the preferred format for SDACT operation. It provides a four digit account code followed by a three digit event code, a two (hex) digit group number, and a three (hex) digit contact number, all of which are used to encode specific point identification.

**3/1 Pulse.** A three digit account code followed by a one digit reporting code. Transmissions are sent as a double round at a rate of 20 PPS (pulses per second). Reporting codes are programmable.

**4/2 Pulse.** Similar to 3/1 except for a four digit account code and a two digit reporting code. Transmission is sent as a double round at 20 PPS. Report codes are programmable.

**BFSK.** Three digits of account code and two digits of reporting code in a single transmission of constant tones. The format has built-in error checking so that a double round is not required. Reporting codes are fixed.

**SIA.** Security Industry Association (SIA) Digital Communication Standard. The SDACT provides level 1 compatibility which includes tonal acknowledge, basic reports only, and fixed reporting codes.

## SDACT Product Selection and Reference

| Model     | Fire Alarm Control Panel | Mounting Location                                                                  | Panel Data Sheet Reference | Installation Instructions | Description                                                                 |
|-----------|--------------------------|------------------------------------------------------------------------------------|----------------------------|---------------------------|-----------------------------------------------------------------------------|
| 4100-6052 | 4100ES and 4100U         | Single 2" slot module                                                              | S4100-0031                 | 574-836                   | Digital Alarm Communicating Transmitters with Serial Communications (SDACT) |
| 4100-6080 | 4100ES with EPS          | Left side of CPU bay end support or left side of an expansion bay                  | S4100-0100                 |                           |                                                                             |
| 4010-9912 | 4010ES                   | Block D                                                                            | S4010-0004                 | 579-954                   |                                                                             |
| 4007-9806 | 4007ES                   | Lower right corner of cabinet mounted flat with included 650-1838 mounting bracket | S4007-0001                 | 579-954                   |                                                                             |
| 4010-9816 | 4010                     | Expansion slot                                                                     | S4010-0001                 | 574-167                   |                                                                             |

## Specifications

|                                                                                                       |                                                                                                                                                                        |
|-------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Voltage                                                                                               | 18-32 VDC, from panel                                                                                                                                                  |
| Current                                                                                               | Standby = 30 mA; Report Mode = 40 mA                                                                                                                                   |
| Point Capacity                                                                                        | 4000 points maximum<br><b>Note:</b> Information received is determined by capability of the digital alarm communicating receiver (DACR) and communication format used. |
| 4100ES/4100U SDACT Capacity                                                                           | Up to 2, 4100-6052 SDACTs can be selected                                                                                                                              |
| Operating Temperature                                                                                 | 32° F to 120° F (0° C to 49° C)                                                                                                                                        |
| Operating Humidity                                                                                    | 10-90% RH @ 85° F (30° C)                                                                                                                                              |
| <b>Telephone Requirements</b>                                                                         |                                                                                                                                                                        |
| FCC Registration                                                                                      | 5QWUSA-30334-AL-E                                                                                                                                                      |
| Jack                                                                                                  | RJ31X (2 required)                                                                                                                                                     |
| Connection Type                                                                                       | Loop start, pulse or tone dialing; Data Certified POTS lines                                                                                                           |
| <b>Compatible SDACT Cables with Plug</b> (two are required and are included with the panel per below) |                                                                                                                                                                        |
| 733-913 (2080-9047)                                                                                   | 14 ft long (4.3 m); included with 4100-6052 (4100ES) and 4010-9912 (4010ES); terminated with RJ-45 plug to spade lugs                                                  |
| 733-986                                                                                               | 7 ft long (2.1 m); included with 4010-9816 (4010); terminated with RJ-45 plug each end                                                                                 |

## SDACT DACR Compatibility Reference

### Available Communication Format (✓ = Compatible)

| Receiver/Service                    | ADEMCO Contact ID (CID) (Preferred) | 3/1 Standard 1800/2300 Hz (10 and 20 PPS) | 3/1 Standard 1900/1400 Hz (10 and 20 PPS) | 4/2 Standard 1800/2300 Hz (10 and 20 PPS) | 4/2 Standard 1900/1400 Hz (10 and 20 PPS) | Radionics BFSK 1800/2300 Hz | Radionics BFSK 1900/1400 Hz | SIA                      |
|-------------------------------------|-------------------------------------|-------------------------------------------|-------------------------------------------|-------------------------------------------|-------------------------------------------|-----------------------------|-----------------------------|--------------------------|
| Osborne/Hoffman QuickAlert Model II | ✓                                   | ✓                                         | ✓                                         | ✓                                         | ✓                                         | ✓                           | ✓                           | ✓                        |
| ADEMCO 685, with 685-8 Line Card    | ✓                                   | ✓                                         | ✓                                         | ✓                                         | ✓                                         | ✓                           | ✓                           | —                        |
| Silent Knight 9000                  | —                                   | With 9032 line card                       | With 9032 line card                       | With 9032 line card                       | With 9032 line card                       | With 9032 line card         | With 9032 line card         | ✓<br>With 9004 line card |
| FBI CP220FB, with Rec-11 Line Card  | ✓                                   | ✓                                         | ✓                                         | ✓                                         | ✓                                         | ✓                           | ✓                           | —                        |
| Bosh Radionics D6500                | —                                   | ✓                                         | ✓                                         | ✓                                         | ✓                                         | ✓                           | ✓                           | —                        |
| Bosch Radionics D6600*              | ✓                                   | ✓                                         | ✓                                         | ✓                                         | ✓                                         | ✓                           | ✓                           | ✓                        |
| SUR-GARD MLR2-DG                    | ✓                                   | ✓                                         | ✓                                         | ✓                                         | ✓                                         | ✓                           | ✓                           | ✓                        |
| DSC TL300** (UL & ULC listed)       | ✓                                   | —                                         | —                                         | —                                         | —                                         | —                           | —                           | —                        |
| Bosch C900V2** (UL listed)          | ✓                                   | ✓                                         | ✓                                         | ✓                                         | ✓                                         | ✓                           | ✓                           | ✓                        |

\* With or without D6680 Network Ethernet Adapter in D6600.

\*\* DACT to Ethernet connection interfaces.

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