

FireShield One to Ten Conventional Input Zones



used for notification appliances and 0.5 amps can be used as auxiliary current. The 10 zone panel will support an additional 3 amps when an optional second transformer (P/N XTR3A120) is installed in the panel.

The 5 and 10 zone control panels can be configured for Class B and Class A operation.

The 1 and 3 zone control panels are configured for Class B operation only.

REMOTE ANNUNCIATOR AND RELAYS

The serial bus standard on FireShield models FS302, FS502 and FS1004 is another installation time saver. This circuit allows the connection of Remote System Indicators (FSRSI), Remote Zone Indicators (FSRZI-A) and Remote Relay Modules (FSRRM) over a four-wire circuit (data and power). Annunciator and relay modules can be installed up to 1000 feet from the panel on 18-gauge wire.

APPLICATION

FireShield provides smoke and fire detection, occupant notification and off-premises signaling for small to medium sized buildings.

Each IDC can be configured for one of eight operating modes. The modes are:

- Alarm - without smoke detector verification
- Alarm - with smoke detector verification and instant activation of contact devices
- Waterflow alarm - no retard
- Waterflow alarm - with 15 second retard
- Combination waterflow (no retard) and supervisory
- Combination waterflow (retard) and supervisory
- Supervisory (latching)
- Monitor - for monitoring devices other than alarm or supervisory such as fire doors or fire dampers

The FireShield single-zone panel has one initiating device circuit (IDC) and one notification appliance circuit (NAC). The IDC can be configured for alarm, with or without alarm verification.

NACs can be individually configured for one of three outputs. These are Genesis, Continuous or Temporal. The Genesis selection eliminates the need to install a Genesis Signal Master.

When configured for Genesis notification appliances the Alarm Silence function will silence any Genesis audible appliance but Genesis strobes will remain active until the panel is reset. Both the horns and strobes on Genesis and Enhanced Integrity notification appliances will be synchronized across all NACs when the Genesis mode is selected.

FEATURES

- FRONT PANEL PROGRAMMING
- 1, 3, 5 AND 10 INITIATING DEVICE CIRCUITS (IDC)
- 1, 2 OR 4 SIGNAL CIRCUITS (NAC)
- OPTIONAL CLASS A IDC & NAC CIRCUITS
- SUPPORTS EC, C2M, EDW AND 6200 SERIES DETECTORS
- ONE PERSON DEVICE TESTING (AUDIBLE OR SILENT)
- COMBINATION WATERFLOW AND SUPERVISORY IDC
- OPTIONAL FIRE DEPARTMENT MODULE OR INTEGRATED DACT/DIALER
- OPTIONAL SERIAL BUS ANNUNCIATORS AND RELAYS

DESCRIPTION

The FireShield fire alarm family consists of 1, 3, 5 and 10 zone conventional fire alarm control panels, an integrated DACT/Dialer, serial annunciator modules and serial remote relay modules. All of these components are microprocessor controlled. The FireShield family is ideal for both new and retrofit installations.

The heart of the system is the control panel. FireShield incorporates features designed to simplify installation, operation and maintenance. These include front panel programming, one person walk testing, selectable IDC and NAC types.

FireShield is powerful enough to meet the demands of today's installations. The FS101 single zone power supply provides 1.0 amp of current for notification appliances (0.1 amps can be used for auxiliary current). The FS302 3 zone power supply provides 2 amps of current for notification appliances (0.5 amps can be used for auxiliary current). The 5 and 10 zone panel power supplies provide 3.0 amps of current. 2.5 amps can be

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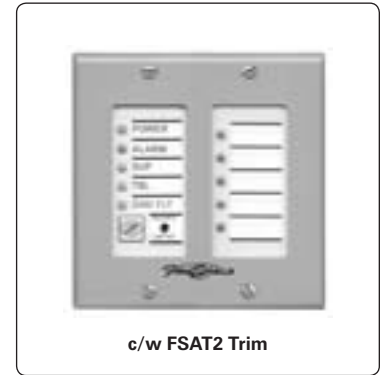
FRSI

REMOTE ANNUNCIATION

The FireShield 3, 5 and 10 zone conventional panels have several options when it comes to remote annunciation. The serial remote annunciator bus can be run up to 1000 feet on untwisted non-shielded 18-gauge cable.

REMOTE SYSTEM INDICATOR (FRSI)

For common system annunciation the FRSI is ideal. It includes four LEDs and a local silence/lamp test switch. The LEDs indicate power status, alarm, supervisory, trouble and ground fault. The silence switch will silence the onboard trouble buzzer if active. The silence switch can also be used to initiate a lamp test of the LEDs on all connected FRSIs and FSRZI-As.



c/w FSAT2 Trim



FSRZI-A

The FRSI can be installed alone or with one or more FSRZI-As on standard single gang electrical boxes. Each panel will support two RSIs. The FRSI and FSRZI-A are supplied with a single gang trim plate. Two and three gang trim plates can be ordered separately if required.

REMOTE ZONE INDICATOR (FSRZI-A)

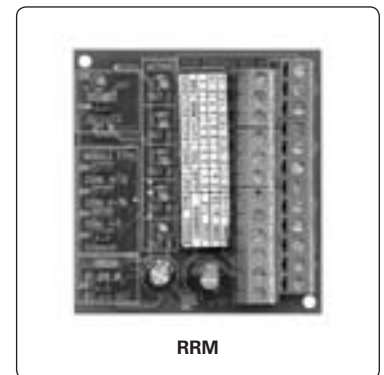
The FSRZI-A is used to indicate zone status. It contains five red LEDs. Depending on the jumper setting selected the LEDs will indicate either IDCs 1-5 or 6-10. The panel can support two modules programmed for each selection. The FRSI and FSRZI-A are supplied with a single gang trim plate. Two and three gang trim plates can be ordered separately if required.

REMOTE RELAY MODULE

The Remote Relay Module (FSRRM) is one component of the system that sets Fire Shield ahead of its class. The module has five form C relays rated a 1 amp. It can be configured to function in either a zone relay mode or a common system mode.

When configured in the zone relay mode, relays energize when the associated IDC is in the alarm state. The module can be configured for activation by IDCs 1-5 or 6-10. One relay is available for each of the following functions: Alarm, Supervisory, Trouble, Power and Monitor.

The FSRRM mounts on a plastic snap track and can be installed in a variety of listed enclosures. The panel will support two RRM's of each configuration.

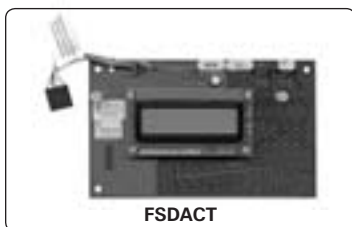


RRM

DACT/DIALER

The optional DACT/Dialer (FSDACT) is a multifunction communications module. Its primary function is as a Digital Alarm Communicator Transmitter (DACT). As a DACT it transmits event messages to a Digital Alarm Communicator Receiver (DACR) at a monitoring facility.

The monitoring facility then notifies the fire department and other responsible parties of the event. Programming options include single or dual line operation, split or dual reporting to two DACRs.



FSDACT

This module can also be used as a modem to connect the panel to both local and remote computers for uploading and downloading of configuration data (programming), panel status and event history. For security, the modem can be configured to accept programming on incoming calls or require to call a preprogrammed number before accepting downloads and sending uploads.

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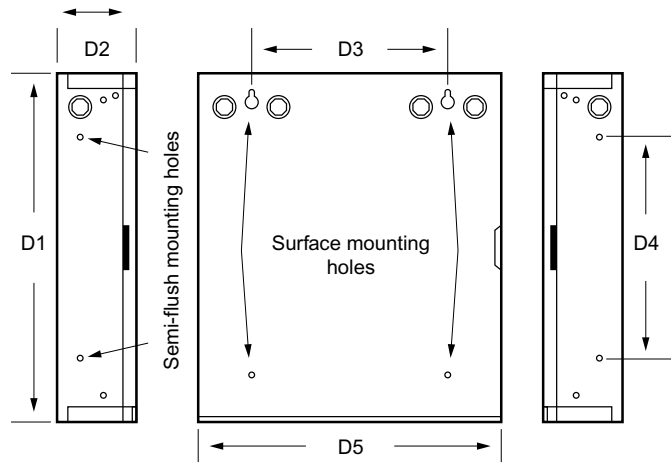
MOUNTING DIMENSIONS:

Control panels can be surface mounted or semi-flush mounted as shown.

Model	D1 ⁽¹⁾	D2	D3	D4	D5 ⁽¹⁾
FS101GC ⁽²⁾	13.0" (93cm)	3.0" (7.6cm)	6.0" (15.2cm)	7.0" (17.8cm)	11.0" (28cm)
FS302GC FS502GC	16.5" (41.9cm)	3.75" (9.5cm)	9.13" (23.2cm)	10.5" (26.67cm)	14.23" (36.14cm)
FS1004GC	23.65" (60cm)	3.75" (9.5cm)	7.75" (19.7cm)	21.27" (54cm)	16.25" (41.27cm)

⁽¹⁾ Add 1-1/2 in (3.81 cm) to D1 and D5 dimensions for trim kit.

⁽²⁾ FS101GC intended to be surface mount



SPECIFICATIONS

Control Panel (FS302, FS502, FS1004)	
FSDACT	Supported
Common alarm relay	Normally open Contact rating 1 amp resistive @ 30Vdc
Common trouble relay	Form C Contact rating 1 amp resistive @ 30Vdc
Common supervisory relay	Normally open Contact rating 1 amp resistive @ 30Vdc
Operating environment	Temperature: 32-120°F (0-49°C) Humidity: 93%RH, non-condensing
*Terminals (wire gauge)	18-12 AWG
EC10/EC20 smoke detectors	24 per circuit
EC30 heat detectors	23 per circuit
C2M Series detectors	21 per circuit
For detailed compatibility information, refer to 3100468 in installation manual	
Control Panel (FS101)	
FSDACT	Not supported
Common alarm relay	Form C Contact rating 1 amp resistive @ 30Vdc
Common trouble relay	Form C Contact rating 1 amp resistive @ 30Vdc
EC10 ion detectors	60 per circuit
EC20 photo detectors	48 per circuit
EC30 heat detectors	46 per circuit
C2M Series detectors	30 per circuit
For detailed compatibility information, refer to 3100592 in installation manual	

FS302, FS502, FS1004 Remote Annunciator Modules	FSRSI	FSRZI-A
Module type	Remote system indicator	Remote zone indicator
Terminals	18-12 AWG, four conductors	
Power requirements	24Vdc	
Maximum modules per panel	2	4
Mounting space	One gang	
Remote Relay Module - FSRRM		
Terminals	18-12 AWG.	
Power requirements	24Vdc	
Relay rating	1.0A@24Vdc	
Maximum modules per panel	Configured for zone mode: 4 Configured for common system mode: 2	
Mounting	Mounts in plastic track (included)	
Enclosure	MFC-A or other listed enclosure (see compatibility listing)	
Power Expander Transformer - FS1004 Only	XTR3A120 provides 3.0A@24Vdc	
Maximum per panel	One	
Mounting	Mounts in 10 zone panel only	

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ORDERING INFORMATION

Catalogue Number	Description
EST-FS101GC	Conventional fire alarm control panel - 1 class B IDC and 1 class B NAC, 120VAC, english, order up to 4.5Ah battery separately, surface mount only
EST-FS302GC	Conventional fire alarm control panel - 3 class B IDCs and 2 class B NACs, 120VAC, english, order up to 7.2Ah battery separately
EST-FS502GC	Conventional fire alarm control panel -5 class B IDCs and 2 class B NACs (pairs of IDCs & NACs convertible to single class A circuits), 120VAC, english, order up to 7.2Ah battery separately
EST-FS1004GC	Conventional fire alarm control panel - 10 class B IDCs and 4 class B NACs (pairs of IDCs & NACs convertible to single class A circuits), 120VAC, english, order up to 18Ah battery separately
For french change "GC" to "GF"	
XTR3A120	Expander transformer, 120VAC - increases available panel power to 6 amps (FS1004GC only)
EOL-P1	End of line resistors and plate. Package includes 4.7KW, 3.6KW and 1.1KW and various other resistors. One required per circuit
FSTRIM35G	Semi-flush trim kit for 3 and 5 zone panels
FSTRIM10G	Semi-flush trim kit for 10 zone panel

OFF PREMISES COMMUNICATIONS

Catalogue Number	Description
FSDACT	Digital communicator/modem/LCD module (mounts in control panel)
2-CTM	City tie module (requires 4" square or 2-gang North American electrical box)
RPM	Reverse polarity module (requires MFC-A or other listed enclosure)

REMOTE ANNUNCIATION

Catalogue Number	Description
FSRSI	Remote system indicator - includes LEDs for display of power, alarm, supervisory, trouble & ground fault, trouble sounder and silence/lamp test switch. Supplied with single gang trim plate. Two and three gang trim plates ordered separately if required. (mounts in single or multi-gang North American electrical box.)
FSRZI-A	Remote zone indicator - includes LEDs for 5 IDCs. May be configured for indication of IDCs 1-5 or 6-10. Supplied with single gang trim plate. Two and three gang trim plates ordered separately if required. (Mounts in single or multi-gang North American electrical box.)
FSAT2	Annunciator trim plate, 2 gang
FSAT3	Annunciator trim plate, 3 gang
RTU	Remote trouble unit, single gan

REMOTE RELAY MODULE

Catalogue Number	Description
FSRRM	Remote relay module - five form C relays. Configurable for zoned operation or common system mode. (Requires MFC-A or other listed enclosure.)
FSRRM-S11	11" mounting track for up to 4 FSRRMs, requires MFC-A enclosure

BATTERIES & BOXES

Catalogue Number	Description
EDW12V4A5	12V, 4.5Ah (two required), 4.2"H x 2.8"W x 3.5" L per cell
EDW12V7A2	12V, 7.2Ah (two required), 3.7"H x 2.6"W x 5.9" L per cell
EDW6V12A	6V, 12Ah (four required), 3.9"H x 2.0"W x 5.9" L per cell
EDW12V18A	12V, 18Ah (two required), 6.5"H x 3.0"W x 7.1" L per cell
BC-2	Battery Cabinet, supports up to 18Ah standby batteries
MFC-A	Multi-function enclosure, listed for fire use