

## SF202B CONTROLS AND FUNCTIONS

1. Speaker (For Alarm Tone)
2. Disarming code buttons
3. System armed indicator $(\mathrm{ON}=$ Armed $)$
4. System ready indicator ( $\mathrm{ON}=$ Loops Closed )
5. Exit/Entry delay slide switch ( 30 second entry and exit delay)
6. Arming button

## APPLICATION

The SF202B is a self-contained alarm unit suitable for homes, apartments, townhouses and similar applications. It provides for connection of detection devices to signal intrusion through doors or windows or to signal fire, smoke, medical or other emergency conditions.

## INSTALLATION PROCEDURE

1. Read installation instructions completely before proceeding.
2. Determine equipment location and run wiring.
3. Install equipment, connect wires and select code.
4. Apply power and check for correct operation.

CAUTION! The SF202B Control Unit contains components which can be damaged by electrostatic charges. Always touch the black wire before touching any other part of the unit. Do not connect power until the installation is complete.

## REQUIRED COMPONENTS

| $\underline{\text { Model \# }}$ | Description | Features |
| :--- | :--- | :--- |
| SF202B | Security control unit | Alarm control and arming <br> SS105B |
| Transformer |  | Soe optional components <br> for complete selection |
| ST025 | Ball-type switch | Doors only |
| OR |  |  |
| ST019 | Entry detection switch | Doors and windows |

OPTIONAL COMPONENTS
Model \#
CM800
PM201/4
PK2019
SF117/2
SF210
SS102A
SS105B
SS106
SS250

Description
Annunciator
Control Module
Annunciator control unit
Pull-cord switch
Alarm expander unit
16 VAC, 10 VA transformer
Plug-in transformer 16 VAC, 30 VA transformer 16 VAC, 250 VA transformer

Features
Alarm annunciation
Latching alarm annunciation
Annunciator control Emergency alarm initiation Single unit loud alarm

Single unit operation Single unit operation

Alarm exp. up to 15 units
Alarm exp. up to 150 units

## EQUIPMENT LOCATION AND WIRING

## CONTROL UNIT

The SF202B Control Unit should be installed at a convenient operating height near the most often used entrance. Do not locate unit near a source of extreme heat or cold. The unit mounts on a single gang outlet box.

## POWER TRANSFORMER

The transformer may not be located near extreme heat or cold. The SS105B plugs into any convenient outlet.

Other transformers may be located at the fuse panel or other source of 117 VAC. Run 2 conductor $\# 18$ from the power transformer to alarm unit.

## ENTRY DETECTORS

The ST019 magnetic-type entry detector may be mounted on windows or doors as shown in Fig. 1. If mounted on metal doors, suitable non-magnetic spacers may be needed to raise the switch from the surface for proper operation.

The ST025 ball-type switch may be used for concealed installation as shown in Fig. 2.

Run 2 conductor \#22 from entry detectors to the SF202B alarm


Fig. 1

## EMERGENCY SWITCH (Optional)

Emergency switches may be installed where needed. The SF117/ 2 pull-cord switch mounts on a single-gang outlet box.

Run 2 conductor \#22 to the SF202B alarm unit. Additional emergency switches may be wired directly to the SF202B or from one emergency switch to the other.

## FIRE ALARM OR SMOKE DETECTOR

Install smoke detectors or similar devices according to instructions supplied. Run wiring the same as for emergency switches.

## ALARM EXPANDER

See SF210 installation instructions for details.

## ANNUNCIATOR AND CONTROL UNIT

Install annunciator and PK2019 annunciator control unit according to instructions supplied.

Run one conductor \#22 selective wire from each SF202B to the annunciator. Run two conductor \#18 from the PK2019 to transformer.

To install PM201/4 Door Sentry Module, consult installation instructions provided with unit.

## CONNECTIONS

Before connecting, make certain that all wires are free from shorts or grounds.

For single unit installation, make connections according to Fig. 3. For multiple unit installations, make connections according to Fig. 4.

Fig. 2


NOTES:

1. Door switch detectors are connected in series (closed loop).
2. Window switch detectors are connected in series (closed loop). If window switches are not used, connect brown wire to black on SF202B.
3. Emergency panic switches or smoke alarms are connected in parallel (open loop).
4. When connecting pigtail connector to SF202B unit, it MUST be connected so that the wire colors on the connector match the color code chart as shown on the SF202B back label. Any other connection may cause permanent damage.


## RISER WIRE SIZE CHART

| Riser <br> Length in Feet | No. of units on riser |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| 20 | 10 | 30 | 40 |  |
|  |  |  |  |  |
| 150 | 18 | 18 | 18 | 16 |
| 300 | 18 | 16 | 14 | 14 |
| 600 | 18 | 14 | 14 | 12 |
| 1000 | 16 | 14 | 12 | 10 |
| 1500 | 12 | 12 | 10 |  |

## CODE SELECTION

1. Remove the control unit from the wall and unplug the terminal connector to remove power.
2. Choose a 4 -digit code using digits from 0 to 9 . Numbers 1 and 6, 2 and 7,3 and 8,4 and 9 , and 5 and 0 may NOT be used together in the 4-digit code.
Example: 6809-yes; 1758 - yes; 1635 -no; 6750 - no.
3. Remove the colored wires from the holes marked A, B, C, D and X .
4. Re-insert the wires in the socket holes as follows:
a. Plug wire with color matching the first digit into hole A.
b. Plug wire with color matching the second digit into hole B.
c. Plug wire with color matching the third digit into hole C.
d. Plug wire with color matching the fourth digit into hole D.
e. Plug the remaining wire into hole marked X .

## OPERATION AND CHECKOUT

1. Check to see if the green READY lamp is ON. If it is not, the unit cannot be armed. Close all protected doors and windows and check all alarm initiating devices before proceeding.
2. When Leaving: Slide the IN/OUT switch to OUT. When Staying IN: Slide the IN/OUT switch to IN.
3. Press code button $3 / 8$ for two seconds. The red ON lamp will light to indicate that the unit is armed.
4. If the OUT mode is selected, approximately 25 seconds are allowed to leave and close the door before the alarm sounds.

## EMERGENCY ALARM (PANIC)

1. Press code buttons $2 / 7$ and $4 / 9$ together to operate steady alarm.
2. Emergency switches may be operated, if installed.

## ALARM SIGNALS

1. Intrusion (the breaking of door or window loops) is indicated by a loud, interrupted tone and by a flashing annunciator lamp, if connected.
2. Emergency (panic or fire alarm) is indicated by a loud, steady tone and by a steady annunciator lamp, if connected. If intrusion and emergency alarms are initiated at the same time, the emergency (steady) alarm has precedence.
3. Other alarms (bell, siren, telephone dialer, etc.) will operate, if connected.
4. Intrusion (interrupted) alarm signals will stop after five minutes and the ON lamp will flash as a reminder that the intrusion occured. Emergency (steady) alarm will continue until the unit is disarmed.

## DISARMING

1. When entering, a soft, steady tone will sound as a reminder that there are approximately 25 seconds to disarm the unit before a loud alarm occurs.
2. Enter the 4-digit disarming code. If the alarm was initiated by a smoke detector or other alarm device, it may be necessary to reset the alarm initiating device before disarming the control unit.
