TekTone® SOUND & SIGNAL

Installation Instructions for DS100 Audible-Visual Annunciator
DS100 Door Sentry & Emergency Alarm System

IL171
Section D
Rev. 12 - 05/2011

Application

The DS100 Door Sentry & Emergency Alarm System is a zoned, audible-visual alarm-indicating system designed to monitor doors, windows, or any devices using open or closed contact switches, including momentary emergency push buttons.

Interruption or making of a circuit causes the specific light indicator to latch on at the master panel and generate an alarm tone which may be silenced without cancelling the visual signal. The visual signal can only be reset at the master.

The PK2019/A Power & Control Unit provides power, control and signalling circuits, plus a normally open and a normally closed auxiliary contact. Screw terminals are provided for wire termination. The PK2019/A is surface mount, and is enclosed in an extruded aluminum case (PK2019) or a flame-retardant (UL® 94V-0) plastic case (PK2019A).

Equipment Installation

PK2019/A Power & Control Unit

Terminal R1 is common, Terminal R2 is Normally Open (NO), and Terminal R3 is Normally Closed (NC). The PK2019/A Power & Control Unit provides a full-form "C" dry contact.

System Components

Model	Description
*DS100/4	Speaker Panel with 4 lights
*DS100/8	Speaker Panel with 8 lights
*DS100/12	Speaker Panel with 12 lights
*DS100/16	Speaker Panel with 16 lights
*DS100/20	Speaker Panel with 20 lights

(DS100-series includes test button and tone-off button & light.)

Model	Description
*AM100/24	Add-on 24 lights
*AM100/28	Add-on 28 lights
*AM100/32	Add-on 32 lights
*AM100/36	Add-on 36 lights

(AM100-series includes test button)

Model	Description
PK2019/A	Power & Control Unit
SS106	Transformer
ST019 or ST025	Magnetic contact
OF200 Series	Frame
OH200 Series	Housing (Flush)
OH300 Series	Housing (Surface)
IH300 Series	Desk Housing

* These panels can be special ordered for parallel annunciation by adding suffix "P" to the part number.

Figure 1—Housing and Frame Dimension Chart

*Number of Zones	Flush	Width Cut-Out	Surface	Width Overall	Frame	Width Overall	Desk	Width
4–20	OH201	4-1/2"	OH301	6-1/8"	OF201	6-1/4"	IH302	9-1/2"
24–56	OH202	8-1/2"	OH302	10-1/8"	OF202	10-1/4"	IH302	9-1/2"
60–92	OH203	12-1/2"	OH303	14-1/8"	OF203	14-1/4"	IH303	13-1/2"
96–128	OH204	16-1/2"	OH304	18-1/8"	OF204	18-1/4"	IH304	17-1/2"
132–164	OH205	20-1/2"	OH305	22-1/8"	OF205	22-1/4"	IH305	21-1/2"
168–200	OH206	24-1/2"	OH306	26-1/8"	OF206	26-1/4"	IH306	25-1/2"

IH300 Series desk cabinets .... height: 6" .... depth: 17"
OH200 Series wall cut-out .... height: 16-1/8" .... depth: 3-7/8"
OH300 Series overall .... height: 17-3/4" .... depth: 3-5/8"
OF200 Series overall .... height: 17-3/4" .... depth: 2-1/2"

*Available only in groups of four.

Figure 2—PK2019A Tone Volume Shunt Settings

Low   Medium   High

Figure 3—PK2019/A with PM023/4 Module and Normally Closed Switches

Normally CLOSED Switches

PM023/4

O C 1 2 3 4 X P

PK2019/A

R1
R2   Relay Output
R3
B
A
W

S
P
D
N
T1
T2

COM
N.O.
N.C.

Tone-off Lamp

Tone-off Button

16 VAC → 117 VAC

Test Button

IL171 PK2019-A with NC Switches Rev0 011711 1
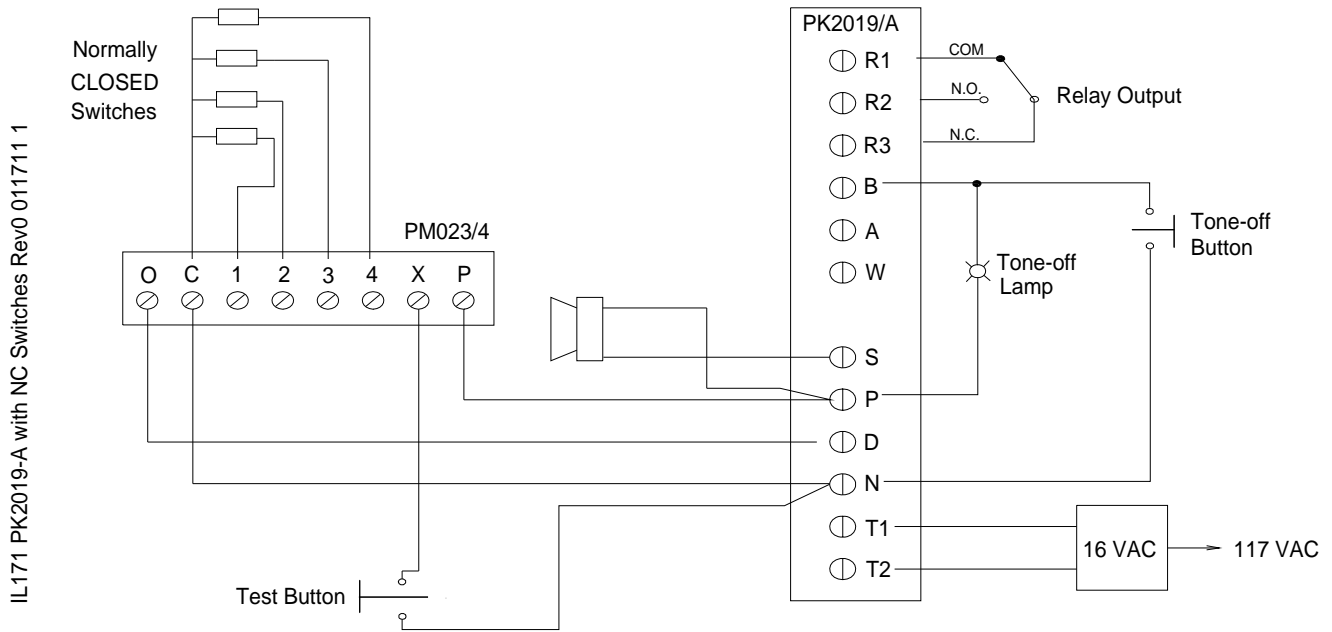
Figure 4—DS100 in Parallel with CM800 Panel and Normally Closed Switches

45 OHM

Terminal Strip in parallel
PM023/4
O C 1 2 3 4 X P

PM110/4N

LAMP TEST BUTTON

PK2019/A
S
P
D
N
T1
T2

PK2019/A
S
P
D
N
T1
T2

SS106 TRANSFORMER

117 VAC

NORMALLY CLOSED CONTACTS
ST019 (ST025)
ENTRY SWITCH (4)

SS106 TRANSFORMER

117 VAC

IL171 DS100 CM800 Combo Parallel 1 PK2019-A Rev1 011511 1
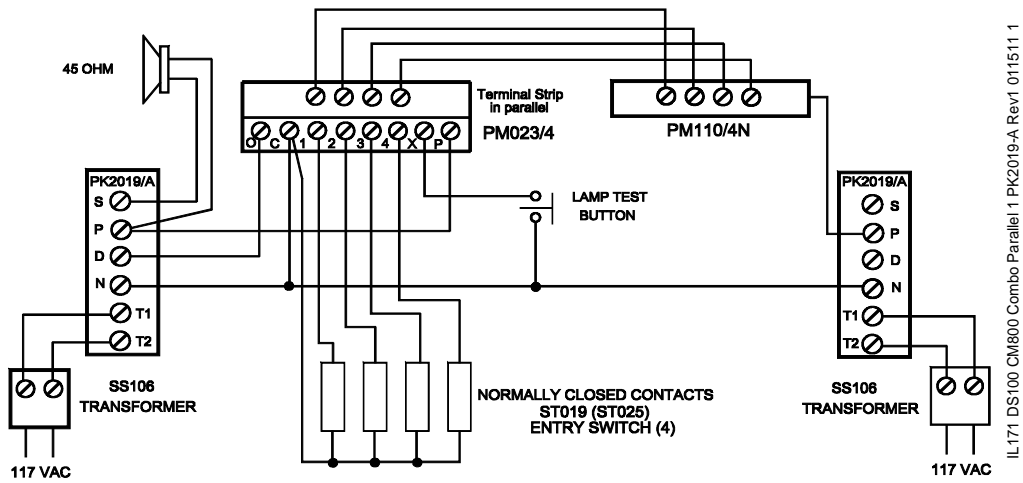
Figure 5—Typical Connection Diagram for Closed Circuit Detection

117 VAC

SS106 Transformer

Control Unit SK019
A
B
C T D P

Lamp Test Button

ST019 (ST025)
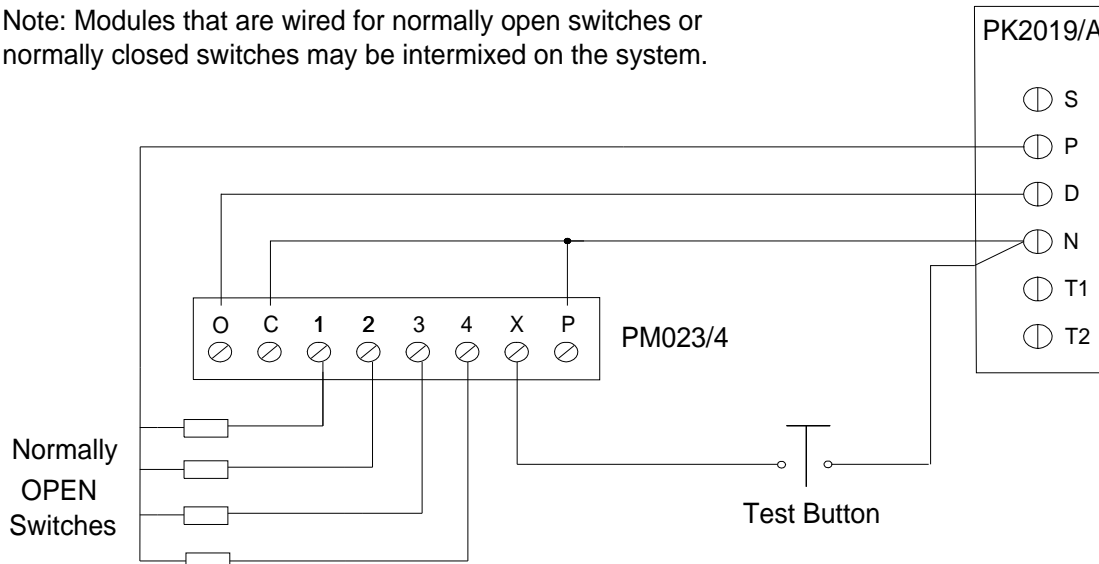Entry Switch (4)

4-button module
O C 1 2 3 4 X P
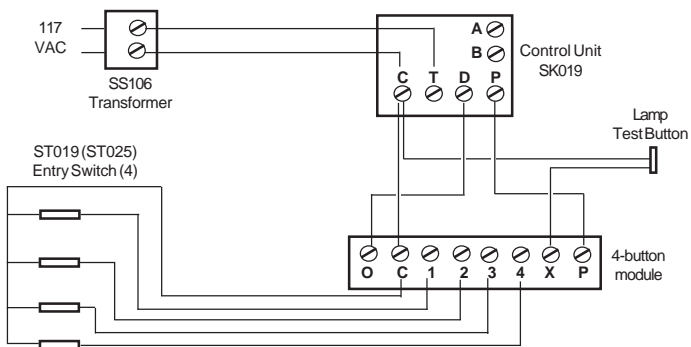
Notes:
1. #18 wire recommended
2. Detection switches must be closed during normal supervision
3. Use 16 volts VAC for power

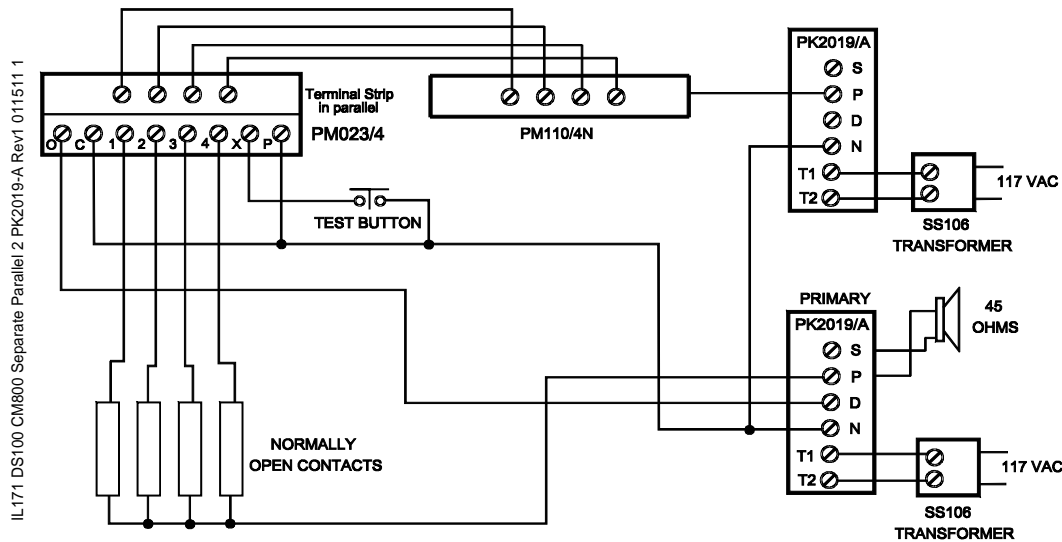## Figure 6—PK2019/A with PM023/4 Module and Normally Open Switches

Note: Modules that are wired for normally open switches or normally closed switches may be intermixed on the system.

PK2019/A

S
P
D
N
T1
T2

O C 1 2 3 4 X P   PM023/4

Normally
OPEN
Switches

Test Button

IL171 PK2019-A with NO Switches Rev0 011711 1

(For remaining connections and terminal ID, see *Figure 3*).

Figure 7—DS100 in Parallel with CM800 Panel and Normally Open Switches

Terminal Strip
in parallel
PM023/4

O C 1 2 3 4 X P

PM110/4N

PK2019/A

S
P
D
N
T1
T2

SS106
TRANSFORMER

117 VAC

TEST BUTTON

NORMALLY
OPEN CONTACTS

IL171 DS100 CM800 Separate Parallel 2 PK2019-A Rev1 011511 1

PRIMARY
PK2019/A

S
P
D
N
T1
T2

45
OHMS

SS106
TRANSFORMER

117 VAC

Figure 8—Typical Connection Diagram for Open Circuit Detection

117
VAC

SS106
Transformer

A
B

C T D P

Control Unit
SK019

Lamp
Test Button

SF113
Emergency Switch (4)

O C 1 2 3 4 X P

4-button
module
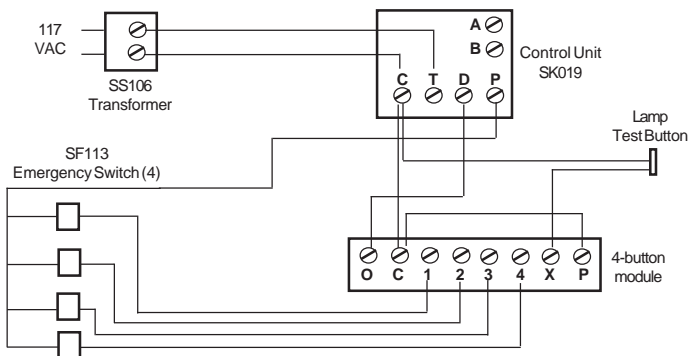
Notes:
1. #18 wire recommended
2. Detection switches must be open during normal supervision
3. Use 16 volts VAC for power