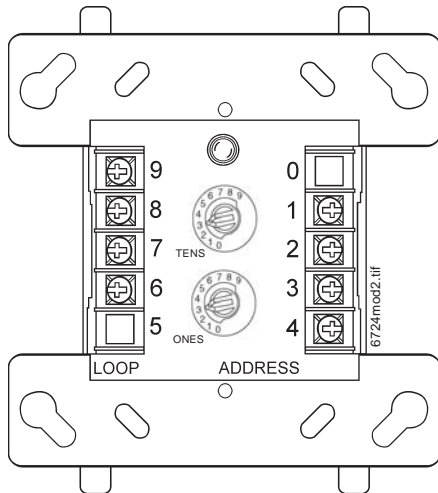# SCE-SS and RCE-SS

Addressable Control and Relay Modules

SCE-SS Module
(See wiring diagram Fig. 5 for RCE-SS)

Description

SCE-SS Control Module — The SCE-SS Addressable Smart*Scan*™ Control Module provides Gamewell intelligent control panels a circuit for Notification Appliances (horns, strobes, speakers, etc.) or to monitor a telephone circuit. Addressability allows the SCE-SS to be activated, either manually or through panel programming, on a select (zone or area of coverage) basis.

RCE-SS Relay Module — The RCE-SS Addressable Relay Module provides the system with a dry-contact output for activating a variety of auxiliary devices, such as fans, dampers, control equipment, etc. Addressability allows the dry contact to be activated, either manually or through panel programming, on a select basis.

Applications

The SCE-SS is used to switch 24 VDC audible/visual power, high-level audio (speakers), or control telephone devices. The RCE-SS may be programmed to operate dry contacts for door holders, Air Handling Unit shutdown, etc., and to reset four-wire smoke detector power.

Construction

* The face plate is made of off-white Noryl®.
* Controls include two rotary switches for direct-dial entry of address (01-99).
* The SCE-SS is configured for a single Class B (Style Y) or Class A (Style Z) Notification Appliance Circuit.
* The RCE-SS provides two Form-C dry contacts that switch together.

Operation

Each SCE-SS or RCE-SS uses one of 99 possible module addresses on a SLC loop. It responds to regular polls from the control panel and reports its type and status, including the open/normal/short status of its Notification Appliance Circuit (NAC). The LED blinks with each poll received. On command, it activates its internal relay. The SCE-SS supervises Class B (Style Y) or Class A (Style Z) notification or control circuits.

Upon code command from the panel, the SCE-SS will disconnect the supervision and connect the external power supply in the proper polarity across the load device. The disconnection of the supervision provides a positive indication to the panel that the control relay actually turned ON. The external power supply is always relay isolated from the communication loop so that a trouble condition on the external power supply will never interfere with the rest of the system.

Rotary switches set a unique address for each module. The address may be set before or after mounting. The built-in TYPE CODE (not settable) will identify the module to the control panel, so as to differentiate between a module and a sensor address.

Features

* Built-in type identification automatically identifies these devices to the control panel.

* Internal circuitry and relay powered directly by two-wire SLC loop. The SCE-SS module requires power (for horns, strobes, etc.), audio (for speakers), or a telephone riser (for handsets). Internal relay feature available on Smart*Scan*™ systems only.

* Use with IF602, 610, 632, 654 and 658.

* Integral LED "blinks" green each time a communication is received from the control panel and turns on in steady red when activated.

* LED blink may be deselected globally (affects all devices).

* High noise immunity (EMF/RFI).

* The SCE-SS may be used to switch 24-volt NAC power, audio (up to 70.7 V_{RMS}) or telephone.

* Wide viewing angle of LED.

* SEMS screws with clamping plates for wiring ease.

* Direct-dial entry of address 01–99 for Smart*Scan*™.

* Speaker, audible/visual, and telephone applications may be wired for Class B or A (Style Y or Z).

Listings

Listings and approvals below apply to the SCE-SS & RCE-SS Series Addressable Control and Relay Modules. In some cases, certain modules may not be listed by certain approval agencies, or listing may be in process. Consult factory for latest listing status.

* UL Listed: file S521.

* CSFM approved:
    file 7300-1288:171.

Gamewell™
A 150-Year Tradition
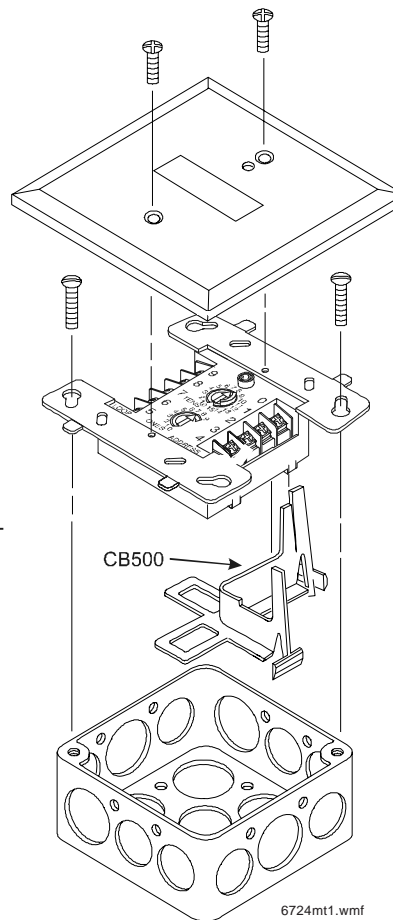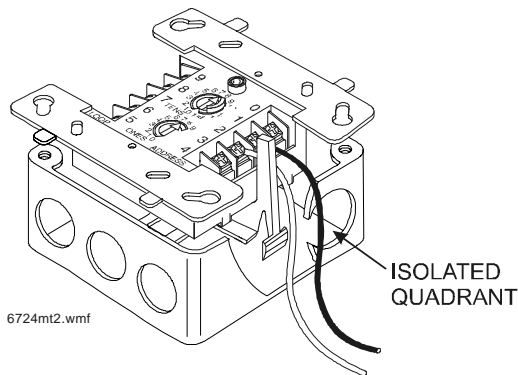
A Honeywell Company

Product Line Information

SCE-SS Intelligent Addressable Control Module.

RCE-SS Intelligent Addressable Relay Module.

A2143-20 Capacitor, required for Class A (Style Z) operation of speakers.

SMB500 Optional Surface-Mount Backbox.

CB500 Control Module Barrier — required by UL for separating power-limited and non-power-limited wiring in the same junction box as SCE-SS-1.

Relay Contact Ratings *for both SCE-SS and RCE-SS models*

Load Description	Application	Maximum Voltage	Current Rating
Resistive	Non-coded	30 VDC	3.0 A
Resistive	Coded	30 VDC	2.0 A
Resistive	Non-coded	110 VDC	0.9 A
Resistive	Non-coded	125 VAC	0.9 A
Inductive (L/R = 5 ms)	Coded	30 VDC	0.5 A
Inductive (L/R = 2 ms)	Coded	30 VDC	1.0 A
Inductive (PF = 0.35)	Non-coded	125 VAC	0.5 A

Mounting Diagrams

Note CB500 Module Barrier, which creates isolated quadrant.

ISOLATED QUADRANT

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CB500

6724mt1.wmf

Specifications *for SCE-SS*

Normal operating voltage: 15 to 32 VDC.

Maximum current draw: 6.5 mA (LED on).

Average operating current: 375 µA group poll (Smart*Scan*™ mode) with LED flashing.

External supply voltage *(between Terminals T3 and T4):* maximum 80 volts (RMS or DC).

Drain on external supply: 2 mA maximum (using internal EOL relay).

EOL resistance: 47K ohms.

Temperature range: 32°F to 120°F (0°C to 49°C).

Humidity range: 10% to 93% non-condensing.

Dimensions: 4.5" (11.43 cm) high x 4" (10.16 cm) wide x 1.25" (3.175 cm) deep. Mounts to a 4" (10.16 cm) square x 2.125" (5.398 cm) deep box.

Specifications *for RCE-SS*

Normal operating voltage: 15 to 32 VDC.

Maximum current draw: 6.5 mA (LED on).

Average operating current: 255 µA group poll (Smart*Scan*™ mode) with LED flashing.

EOL resistance: not used.

Temperature range: 32°F to 120°F (0°C to 49°C).

Humidity range: 10% to 93% non-condensing.

Dimensions: 4.5" (11.43 cm) high x 4" (10.16 cm) wide x 1.25" (3.175 cm) deep. Mounts to a 4" (10.16 cm) square x 2.125" (5.398 cm) deep box.

Normal operating voltage: 15 to 32 VDC.

Maximum current draw: 6.5 mA (LED on).

Average operating current: 255 µA group poll (Smart*Scan*™ mode) with LED flashing.

EOL resistance: not used.

Temperature range: 32°F to 120°F (0°C to 49°C).

Humidity range: 10% to 93% non-condensing.

Dimensions: 4.5" (11.43 cm) high x 4" (10.16 cm) wide x 1.25" (3.175 cm) deep. Mounts to a 4" (10.16 cm) square x 2.125" (5.398 cm) deep box.
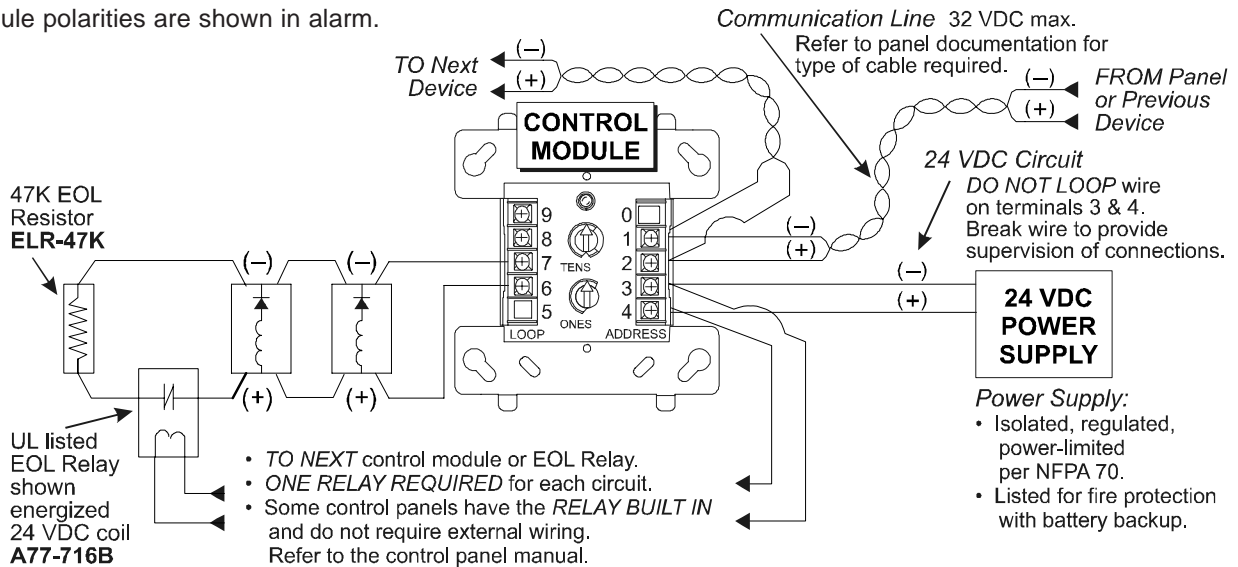
Wiring Diagrams

The following wiring diagrams are provided:

1) **SCE-SS**: Typical notification appliance circuit configuration, NFPA Style Y.

2) **SCE-SS**: Typical fault-tolerant notification appliance circuit configuration, NFPA Style Z.

3) **SCE-SS**: Typical wiring for speaker supervision and switching, NFPA Style Y.

4) **SCE-SS**: Typical fault-tolerant wiring for speaker supervision and switching, NFPA Style Z.

5) **RCE-SS**: Relay module wiring diagram.

▼ **Fig. 1** *SCE-SS: Typical notification appliance circuit configuration, NFPA Style Y.*

- Connect modules to Listed compatible Gamewell control panels only.
- All wiring shown is supervised and power limited.
- Module polarities are shown in alarm.
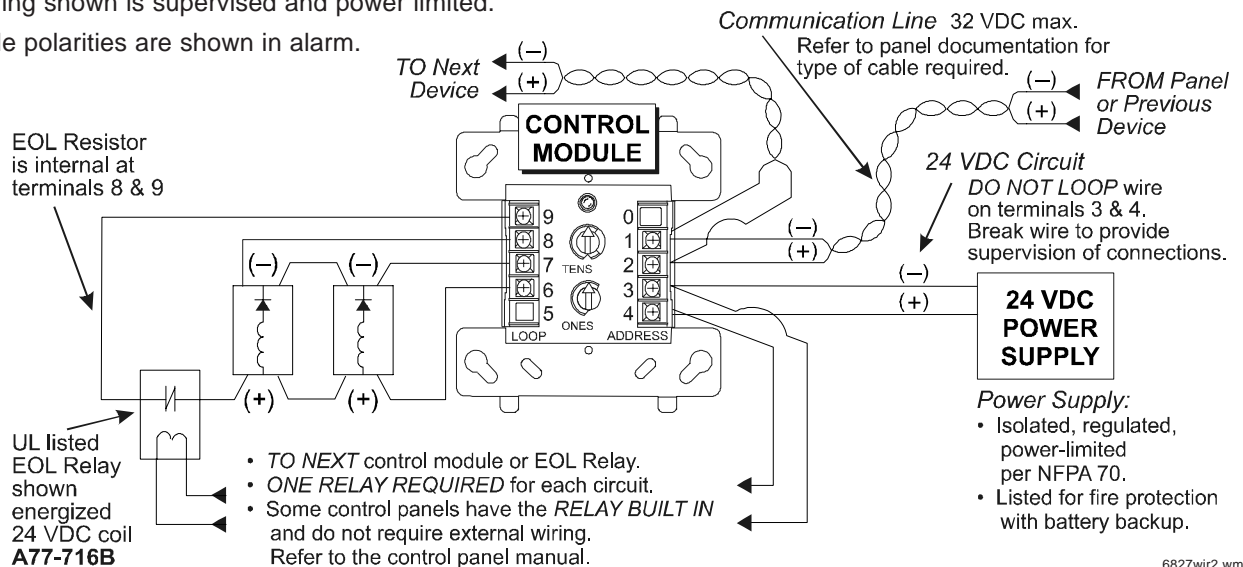

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▼ **Fig. 2** *SCE-SS: Typical fault-tolerant notification appliance circuit configuration, NFPA Style Z.*

- Connect modules to Listed compatible Gamewell control panels only.
- All wiring shown is supervised and power limited.
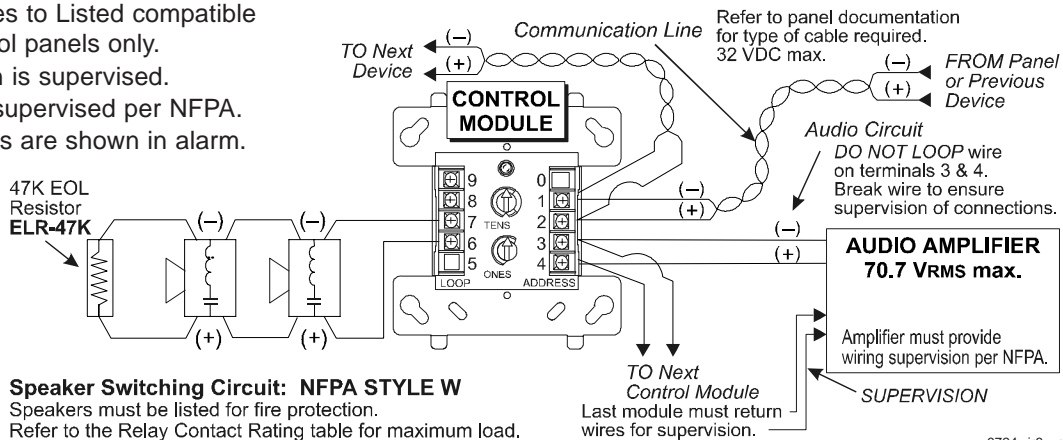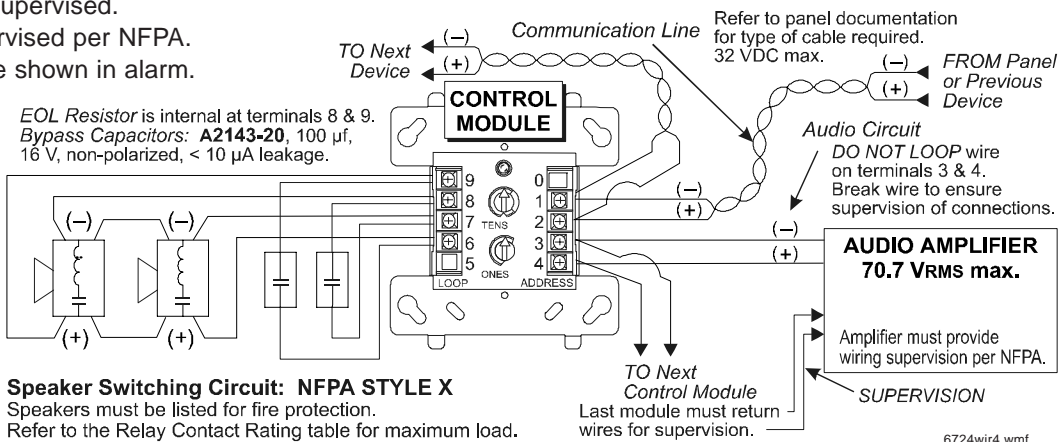- Module polarities are shown in alarm.

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▼ **Fig. 3** *SCE-SS: Typical wiring for speaker supervision and switching, NFPA Style Y.*

- Connect modules to Listed compatible Gamewell control panels only.
- All wiring shown is supervised.
- Wires must be supervised per NFPA.
- Module polarities are shown in alarm.

TO Next Device

(−) (+)

Communication Line

Refer to panel documentation for type of cable required. 32 VDC max.

(−) (+)

FROM Panel or Previous Device

CONTROL MODULE

9 8 7 6 5
TENS
0 1 2 3 4
ONES
LOOP ADDRESS

47K EOL Resistor **ELR-47K**

(−) (−)

(+) (+)

Audio Circuit *DO NOT LOOP* wire on terminals 3 & 4. Break wire to ensure supervision of connections.

(−) (+)

(−) (+)

AUDIO AMPLIFIER 70.7 VRMS max.

Amplifier must provide wiring supervision per NFPA.

TO Next Control Module Last module must return wires for supervision.

SUPERVISION

Speaker Switching Circuit: NFPA STYLE W
Speakers must be listed for fire protection.
Refer to the Relay Contact Rating table for maximum load.

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▼ **Fig. 4** *SCE-SS: Typical fault-tolerant wiring for speaker supervision and switching, NFPA Style Z.*
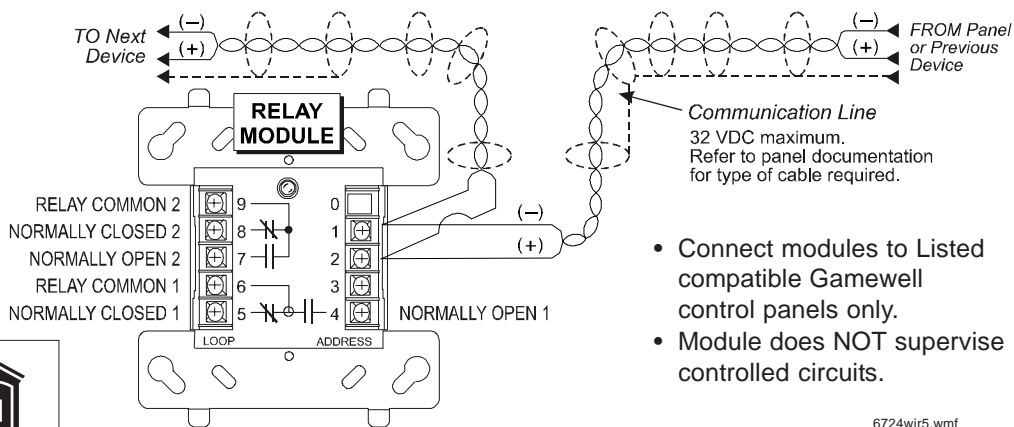
- Connect modules to Listed compatible Gamewell control panels only.
- All wiring shown is supervised.
- Wires must be supervised per NFPA.
- Module polarities are shown in alarm.

TO Next Device

(−) (+)

Communication Line

Refer to panel documentation for type of cable required. 32 VDC max.

(−) (+)

FROM Panel or Previous Device

CONTROL MODULE

9 8 7 6 5
TENS
0 1 2 3 4
ONES
LOOP ADDRESS

EOL Resistor is internal at terminals 8 & 9.
Bypass Capacitors: **A2143-20**, 100 μf, 16 V, non-polarized, < 10 μA leakage.

(−) (−)

(+) (+)

Audio Circuit *DO NOT LOOP* wire on terminals 3 & 4. Break wire to ensure supervision of connections.

(−) (+)

(−) (+)

AUDIO AMPLIFIER 70.7 VRMS max.

Amplifier must provide wiring supervision per NFPA.

NOTE regarding *AUDIO AMPLIFIER* in Figures 3 & 4:

1) Audio circuit wiring must be twisted-pair as a minimum. See Gamewell installation manual for detailed information.

Speaker Switching Circuit: NFPA STYLE X
Speakers must be listed for fire protection.
Refer to the Relay Contact Rating table for maximum load.

TO Next Control Module Last module must return wires for supervision.

SUPERVISION

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▶ **Fig. 5** *RCE-SS: Relay module wiring diagram.*

TO Next Device

(−) (+)

(−) (+)

FROM Panel or Previous Device

RELAY MODULE

RELAY COMMON 2 — 9
NORMALLY CLOSED 2 — 8
NORMALLY OPEN 2 — 7
RELAY COMMON 1 — 6
NORMALLY CLOSED 1 — 5

0
1
2
3
4 — NORMALLY OPEN 1

LOOP ADDRESS

(−) (+)

Communication Line
32 VDC maximum.
Refer to panel documentation for type of cable required.

- Connect modules to Listed compatible Gamewell control panels only.
- Module does NOT supervise controlled circuits.

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Specifications and wiring information are provided for information only and are believed to be accurate. Gamewell-FCI assumes no responsibility for their use. Data and design are subject to change without notice. Installation and wiring instructions shipped with the product shall always be used for actual installation. For more information, contact Gamewell-FCI.