Industrial Radio Alarm Control System
IRAC-S

Features:

- Radio Transmitter (High or Low Band)
- Modular Panel
- Four Input Class B Zone Modules (Expandable 20 or 52 Zones)
- Two Input Class A Zone Modules (Expandable 10 or 26 Zones)
- 4 Auxiliary Relay Modules
- Walk Test Module
- NEMA 3R Rain-Proof Cabinet or NEMA 1 Indoor Available
- Inputs can be configure non-latching and/or non-audible
- Additional 10 amps of Synchronized NAC power with AUX power supply option

STAR TECHNOLOGY

- Frequency and Call Box numbers are programmable by laptop computer.
- Programmable test time.
- Software defined transmitter, no crystals.

Description:

The IRAC-S, Industrial Radio Alarm Control System, is a completely modular, self-contained conventional Fire Alarm Control System. The IRAC-S is a heavy duty panel capable of operating in a wide range of temperatures and designed for detecting the operation of any approved signal initiating device, indicating the area of the alarm condition by annunciator LEDs, and operates all alarm and auxiliary devices.

The IRAC-S is furnished in a NEMA 3R rainproof enclosure or a NEMA 1 indoor enclosure. The IRAC-S has the maximum expansion of 20 (Class A) or 48 (Class B) zones, depending on the enclosure and options that are selected.

In addition, the modular IRAC-S Panel has the optional capability of automatic radio reporting for alarms, supervisory, and trouble conditions with test status reporting for use with a compatible receiving unit.
Specifications:

Construction: NEMA 1R Indoor Cabinet with lock
NEMA 3R Outdoor Cabinet with lock.

Temperature: -40°F to +140°F (-40°C to +60°C)

Power: 100 or 120 VAC line voltage
24 Volt DC Back-Up Battery Power Supply

Radio Trans.: 72-76 MHz and 132-174 MHz

Weight: Small Enclosure; 42 lbs.
Large Enclosure: 75 lbs

Dimensions:
- Small Enclosure NEMA 1R: 20" H x 16" W x 6.6" D
- Large Enclosure NEMA 1R: 42" H x 16" W x 6.6" D
- Small Enclosure NEMA 3R: 20" H x 16" W x 6.6" D
- Large Enclosure NEMA 3R: 42" H x 16" W x 6.6" D

IRAC-S NAC Output: Maximum 1.3A

Zone Alarm Out (O.C.): Maximum 500mA (For use with annunciators, or individual use etc.)

Trouble/Alarm Relay Contact Rating: Maximum 30VDC @ 500mA

Aux NAC Power Supply Output:
- Class 2 Rated power limited outputs.
- 24VDC voltage regulated power limited outputs.
- 10 amp max total alarm current.
- 2.5A max current per output.
- Two auxiliary outputs rate at 1 amp each (1 amp continuous, 1 amp AC disconnect
  Programmable supervised indicating circuit outputs:
  Four (4) Class B, Style W, Y or Four (4) Class A Style Z, or Two (2) Class A, Style Z and
  Two (2) Class B, Style W, Y.
- Thermal and short Circuit protection with auto reset.

System Capability and Approvals:

IRAC-S Panels can be installed; as a basic fire alarm panel, a fire suppression panel, or as a radio alarm panel in an existing or new Radio Fire Alarm Reporting System using Kingfisher Company, inc. compatible Radio Base Receiving Stations.

For additional information on adding IRAC-S Panels to your existing Kingfisher Company, inc. Radio Fire Alarm Reporting System, please consult the factory.

Optional Radio Fire Alarm Reporting Feature:

The IRAC-S Panel with its modular design can be easily upgraded from its fire alarm configuration to a radio fire reporting system within a matter of minutes. Simply add a transmitting antenna, coaxial cable, and two modular plug-in boards consisting of a modular CPU board and transmitter board, for one-way reporting. The IRAC-S Panel with its capability of automatic radio reporting for alarms, supervisory, and trouble conditions is now ready for use with a compatible receiving unit.

Kingfisher Company, inc. 81 Old Ferry Road - Lowell, MA 01854
Phone: 978-596-0214  Fax: 978-596-0217 www.kfci.com
### ORDERING INFORMATION

<table>
<thead>
<tr>
<th>KFCi Part #</th>
<th>Model #</th>
<th>Description</th>
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<tbody>
<tr>
<td>99103-###A-XX</td>
<td>XXXX</td>
<td>IRAC-S Main Subplate—Choose Low or High Band, Class A, Up to 10 Zones, NEMA 1 or NEMA 3R</td>
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<tr>
<td>99103-###B-XX</td>
<td>XXXX</td>
<td>IRAC-S Main Subplate—Choose Low or High Band, Class B, Up to 20 Zones, NEMA 1 or NEMA 3R</td>
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<td>99104-###A-XX</td>
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<td>IRAC-S Main Subplate—Choose Low or High Band, Class A, Up to 26 Zones, NEMA 1 or NEMA 3R</td>
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<td>99104-###B-XX</td>
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<td>IRAC-S Main Subplate—Choose Low or High Band, Class B, Up to 52 Zones, NEMA 1 or NEMA 3R</td>
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<tr>
<td>66103-HB</td>
<td>XXXX</td>
<td>Transmitter Assembly Module—High Band</td>
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<td>66103-LB</td>
<td>XXXX</td>
<td>Transmitter Assembly Module—Low Band</td>
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<tr>
<td>91117</td>
<td>XXXX</td>
<td>Expansion Zone Module—2 Zones, Class A or Class B, Includes 66110 Zone Motherboard</td>
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<td>91119</td>
<td>XXXX</td>
<td>Expansion Zone Module—4 Zones, Class B, Includes 66110 Zone Motherboard</td>
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<tr>
<td>66170</td>
<td>ARCM</td>
<td>Auxiliary Relay Control Board—Four Relay, Requires One Module Spot</td>
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<tr>
<td>66824</td>
<td>ARBM</td>
<td>Auxiliary Relay with Bypass Switch Circuit Board</td>
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<tr>
<td>66160</td>
<td>WTM</td>
<td>Walk Test Board. Allow testing of system by one technician</td>
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<td>74002</td>
<td>CA203A</td>
<td>Enclosure, NEMA 3R, Small, with 211 Lock and Key</td>
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<td>74102</td>
<td>CA201R</td>
<td>Enclosure, NEMA 1R, Small, with 211 Lock and Key</td>
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<td>74003</td>
<td>CA523R</td>
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<td>74103</td>
<td>CA521R</td>
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<td>91199</td>
<td>XXXX</td>
<td>NAC10A Subplate</td>
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<tr>
<td>99103-DTS</td>
<td></td>
<td>Data Specification Sheet</td>
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</tbody>
</table>

#### Main Subplate Ordering Information:

- **99103 = Small Enclosure**
- **99104 = Large Enclosure**
- **H = High Band, L = Low Band**
- **A = Class A, B = Class B**
- **Quantity of Zones = 2 digits**
- **Enclosure: NEMA 1 or NEMA 3R**

#### Example:

- **99103-H08A-1**
- **99103-L20B-3R**

- **NEMA 3R Enclosure**
- **“B” for Class B**
- **“20” for 20 Zones**
- **“L” for Low Band**
- **“99103” for Small Enclosure**
Spare Parts:
- See 99103-TEC for a list of spare parts such as fuses or individual boards and modules.

Installations:
- All installations shall comply with the King-Fisher Antenna Installation manual part # 75092

NAC10A:
- See 81197-DTS for information on ordering a standalone NAC10A