REDBAN SA880-IS Addressable Sounder with Flasher with Built-in Isolator
REDBAN SA880 Addressable Sounder with Flasher
REDBAN SK808F Sounder with Flasher

Doc No: UM-SA880-IS-0823-R2-EN

SPECIFICATIONS

Operating Voltage Range:	16 to 28 VDC
Standby Current:	<150µA @ 24 VDC (average with LED blink)
Max. Alarm Current:	<15 mA @ 24 VDC (Inc. Flasher)
Operating Humidity Range:	10% to 93% R.Humidity, N.C.
Sound Pressure Level:	<86 dB @1mt (Note 1)
Sound Frequency:	800-2500 Hz
Flasher:	Type A, W-3-12
Flash frequency:	1Hz
Operating Temperature Range:	-10°C to 50°C
IP Class:	IP21C @ EN 60529:1991
Built-in Isolator Switch Current:	230-400mA (Iso_{min} – Iso_{max})
Built-in Isolator Reconnect C.:	3 – 13 mA (Isc_{min} – Isc_{max})
Built-in Isolator Leakage C.:	<18mA
Built-in Isolator Type:	Self Current Sensing (Annex A.3)
Serial resistance:	1 Ohm max
Diameter/Hight:	105mm / 80mm
Weight:	167 grams

Note 1: A-weighted sound level at least 86 dB at a distance of 1 m from the reference point of the device for the following directions of radiation: 15^0, 45^0, 75^0, 105^0, 135^0, 165^0

GENERAL DESCRIPTION

SA880 Series Indoor Sirens are designed for use audible/visual indication in addressable and conventional fire alarm systems. They are ideal for warning during an emergency event, providing primary and secondary signaling for fire and security applications such as hotel, motel or residential fire system applications. SA880 series sounders produce a loud sound and visual flasher to notify occupants to evacuate the buildings.

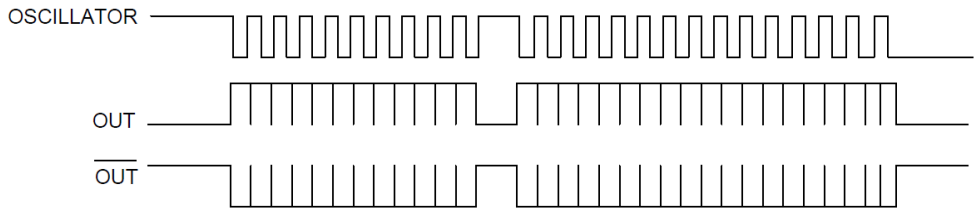
The device is designed as to work in both addressable systems and conventional systems. SA880 series sounders can be connected to addressable fire alarm system on the loop or conventional system by connection configuration. There are four connection terminals on the device. Terminals 2 and 3 is for conventional connection terminals, 4-1 and 3 are the addressable loop connection terminals.

When 2(+) and 3(-) connected the device will activate when power supplied. This is conventional type operation. Even addressable side connected, powering conventional side will suppress and activate the sounder. When only used as conventional side the device named as SK808F.

When connected and used as addressable sounder flasher called SA880. Also there is built-in isolator when used in addressable system. The model name is SA880-IS Addressable Sounder with Flasher and with Built-in Isolator.
In SA880-IS/SA880 Addressable device; Inside MCU's EEPROM keep the sensor's address that can be set by a portable Address setting device PP1201 Device Programmer.
SA880-IS is Addressable Sounder with Flasher and with built-in Isolator. When any shortcircuit occurs on the transmission path, the built in isolator will cut the line. The device will continue on working and it cut the shorted side of the connection. The built-in isolator has no input or output side, both positive sides are similar.

In order to cancel the built-in isolator, R35 and R37 resistors must be shorted by a solder machine by a technician. SA880 model is built-in isolator bypassed (shorted) factory default models.

A powerfull piezo is driven pushpull generates the warning sound. The sound is unique. The sound frequency is between 800-2500Hz. The sound pattern is as shown.



INSTALLATION

The fire device consists of two main parts: a base and a sounder head. The device head is fixed on the base by the means of bayonet joints. When the siren head is placed on the base, make sure that the bench mark stands about 20mm before the respective bench mark on the base; then rotate clockwise to fix. The bench marks should fully coincide. The contacting plates are fixed to the base. The connection between the incoming wires and the contact plates is made by the provided screw.

In order to lock sounder head there is a special screw at the side of the base. Please use special tool to unscrew the lock joint.

The device is for indoor use. When installed for visual or visual/sound purpose, the wall mounth should not below 2,4 meters.

There is a screw that locks the base and the upper case, in order to avoid unwanted intervenes. The special screwdriver tool must be used to unlock.

WIRING

The wiring should be done as shown in figures. Proper wire gauges should be used. The installation wires should be color-coded to limit wiring mistakes and ease system troubleshooting. Improper connections will prevent a system from responding properly in the event of a fire.
Remove power from the communication line before installing module.

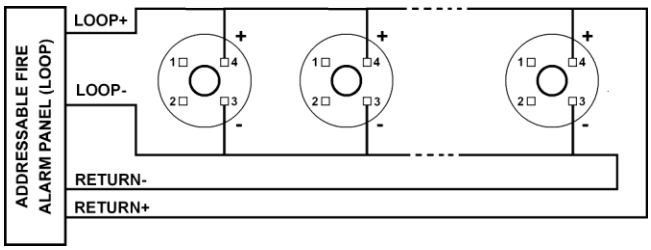


Figure 1- Wiring Connection Addressable System Sounder/Flasher SA880

When connecting loop line by using onboard short circuit isolator, the positive side must be connected through 1 and 4 positive leads.

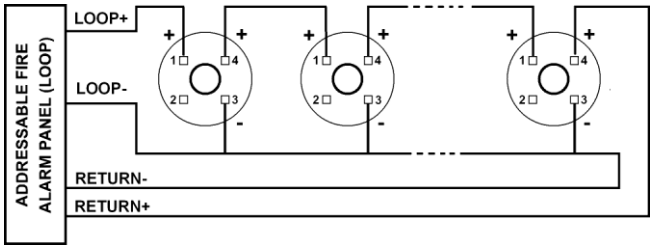


Figure 2- Wiring Connection Addressable System Sounder/Flasher SA880-IS with Isolator

1. Wire the modules and controlled devices as shown in wiring diagrams.
2. Set the desired address by PP1201 Device Programmer portable address setting device.
3. After all devices have been installed, apply power to the control unit and activate the communication line.
4. Test the sounder as connected devices as described in this manual.

When using SA880-IS built in isolator, two plus terminals must be connected (4) Loop+ Vin and (1) Loop+ Vout separately. If not, the built-in isolator will not work.

Conventional Wiring;

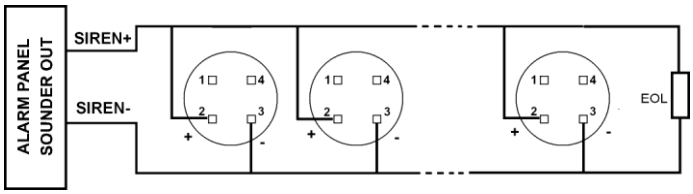


Figure 3- Wiring Connection Conventional System Sounder/Flasher SK808F

SK808F Conventional Sounder with Flasher connection is shown in Figure 3. While connecting, care the polarity. In supervised Sounder Output on panel, mostly End-Of-Line Resistor needed. Please apply the panel connection diagrammes.