

FEATURES:

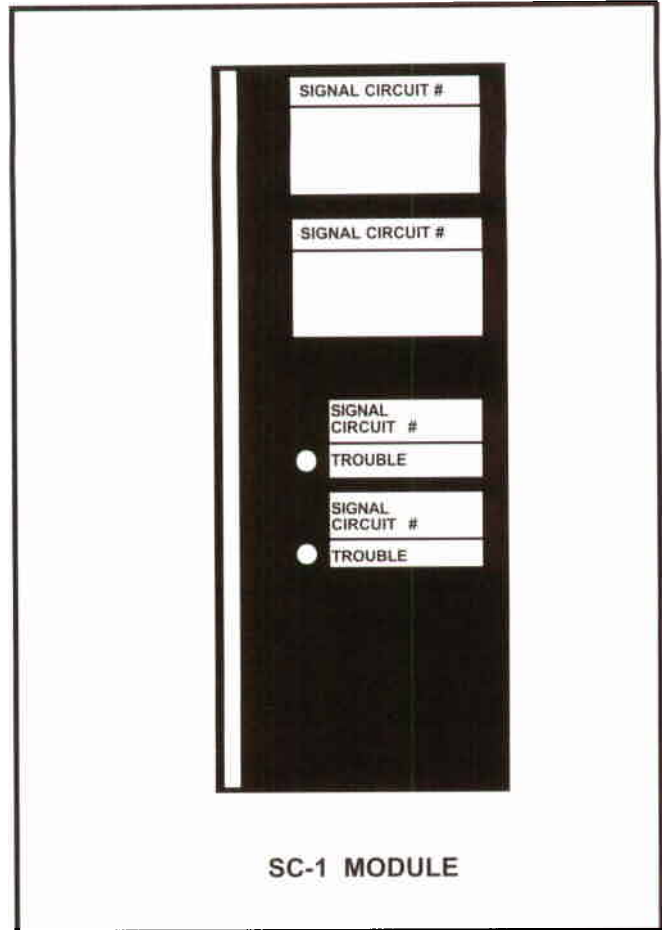
- UL Listed, File #S405, Standard #864 under the MPC-2000 system control unit
- CSFM Listed, File #7165-0065:123 under the MPC-2000
- BSA Approved, Calendar #524-77-SA under the MPC-2000
- Programmable dual signaling circuits
- Individual signal circuit cutoff function via software disconnect switch
- Class "A" (Style "Z") or Class "B" (Style "Y") operation/wiring compatible
- Completely power limited with built in transient protection
- Automatic disconnect circuitry upon short circuit detection
- Individual yellow trouble/status led's per circuit
- Software selectable individual output formats for steady, march time beat, temporal, master code and zone coding
- Software selectable for individual silencable or non-silencable formats
- Capacity up to 2.5 Amp @ 24VDC or 62 Watts @ 25 VAC each circuit
- Software selectable individual time delay on/automatic cutoff
- Custom labeling areas provided on the module
- IBEW/USA quality crafted



GENERAL

The SC-1 dual signal circuit module provides for the supervision and operation of two either 2-wire/Class "B" (Style "Y") or 4-wire/Class "A" (Style "Z") signaling circuits. These two circuits are electrically independent and may be individually powered and programmed. The SC-1 module supervises each circuit individually for field wiring faults such as open circuits, short circuits and positive/negative ground conditions. Each circuit is capable of powering standard compatible listed 24VDC polarized parallel audio/visual signaling devices. Each signal circuit also provides access to software enabled signal circuit disconnect, individual visible yellow trouble/status LEDs, custom circuit labeling area and software enabled output, silencing and timed formats. All signal circuit wiring is power limited thus eliminating the necessity of externally fusing the wiring and allowing for the use of power limited cabling. Field wiring connections are made via pressure type screw terminals to insure positive connections.

The SC-1 module includes a supervisory network to detect open circuits, grounded wiring faults and shorted circuits. In the event that a shorted circuit is detected, the module will automatically disconnect the effected circuit so that system power supply shutdown will not occur thus rendering any other circuits non-operable. Detection of any fault condition will light the appropriate yellow circuit trouble LED as well as activate the MPC-2000's system trouble circuitry and system status display(s).



DESCRIPTION

The SC-1 dual signal circuit module serves as the focal point of supervision and alarm signaling for two independent signaling (output) circuits. All field mounted alarm indicating devices are connected to the SC-1 module(s) via monitored "hard wired" loops. The module constantly checks this wiring for opens, shorts and positive/negative ground fault conditions and reports these status' as trouble conditions. On board circuitry provides for complete alarm indicating circuit operation with a single open or ground fault condition if the field circuit is wired using the 4-wire/Class "A" (Style "Z") configuration. If a short circuit condition is found by the automatic sensing circuitry, the effected circuit will be automatically removed from the system so that other indicating circuits will not be effected. The SC-1 module will signal an alarm condition as directed by the system programming stored in the MPC-2000's CU-2 control module for a given alarm situation.

ORDERING INFORMATION

MODEL#	PART#	DESCRIPTION
SC-1	401313	Dual Signal Circuit Module

FARADAY MPC-2000 FIRE ALARM SYSTEM CONTROL UNIT - OPTION SC-1

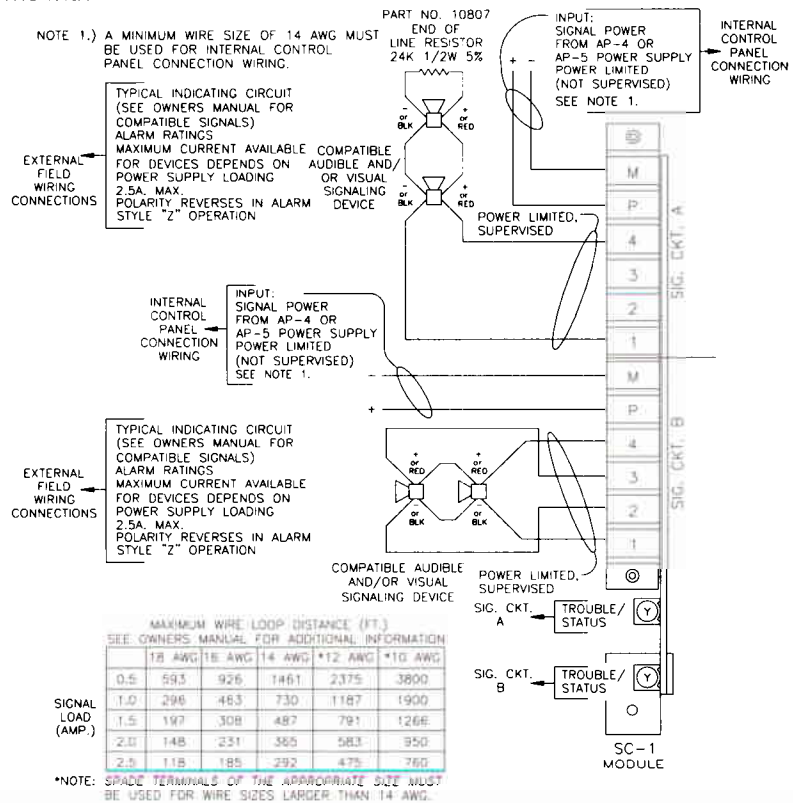
APPLICATION

- Class "A" (Style "Z") operation requires a 4-wire cabling configuration in which a pair of wires is returned from the last signaling device to the associated signaling module (4-wire loop). When the field wiring is terminated with an end of line resistor, the Class "A" (Style "Z") operation will not be enabled and the module will function in the 2-wire/Class "B" (Style "Y") operation. The signaling module must contain the necessary circuitry to accomplish the Class "A" (Style "Z") mode. Class "A" (Style "Z") operation cannot assure complete circuit operation if two or more faults are present simultaneously on either side of the signaling loop.
- When using signaling devices for both audible and visual signaling, it is recommended that the audibles and visuals be separated into separate groups of circuits so that when the audibles are silenced, the visuals can remain operating until the system is reset.
- The SC series of modules are non-powered signal circuits hence signal operating power must be bussed into them from an AP-4 or AP-5 power supply module(s). This format allows for extended capacity per circuit (up to 2.5 Amp @ 24VDC) and maximum flexibility in system power supply assignments.
- Shielded wire is not required on this system and in most cases will create more problems than it prevents. Faraday alarm equipment is designed with built-in transient suppression networks thus negating the requirements of shielded cabling.
- Never run low voltage signal wiring in the same conduit with high voltage power wiring. Most electrical codes will not permit this as it can cause problems with any low voltage system.

TECHNICAL

- Power Provision:** Each circuit:
Upto 2.5 Amp. @ 24VDC
power limited non-resettable.
Must be sourced from an
AP-4 or AP-5 power supply
module.
- Power Consumption:** Alarm-.060 Amp.
Standby - .010 Amp.
- Space Provision:** None
- Space Consumption:** (1) Module space
- Channel Provision:** None
- Channel Consumption:** (2) Circuits on the output
(indicating) channel
- Audio Rating:** 25VAC @ 62 Watt Max.
Twisted pair cable (per ckt.)
- Speaker Input:** From amplifier supervisory
board

TYPICAL WIRING



WARNING - The information contained in this document is intended only as a summary and is subject to change without notice. The devices described in this document have specific instruction sheets which cover various technical, limitation and liability information. Copies of these instruction sheets and the General Product Warning and Limitations Document, which also contains important information, are provided with the product and are available from the Manufacturer. Information contained in these documents should be consulted before specifying or using the product. For further information or assistance concerning particular problems contact the Manufacturer.