

## FEATURES

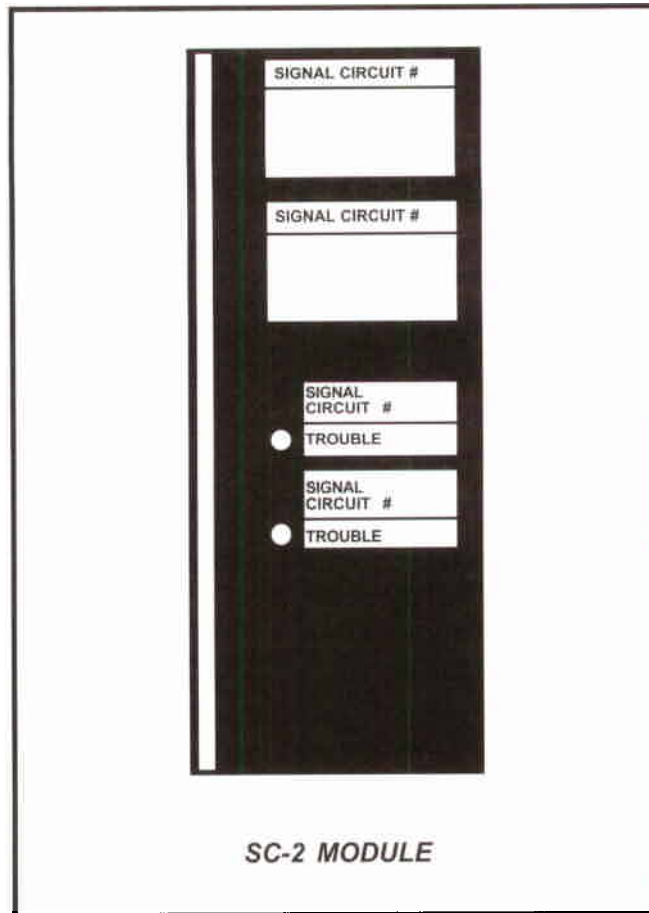
- UL listed, File #405, Standard #864 under the MPC-2000 system control unit
- CSFM, listed #7165-0065:123
- BSA, approved, calendar #524-77-SA
- Dual supervised conventional signal circuits Class "B" (Style "Y")
- Individually software programmable circuits for steady, march time beat, temporal, master code and zone coding outputs
- Custom labeling area per signal circuit on module front
- Completely power limited
- Built-in transient protection
- Automatic disconnect circuitry upon short circuit detection
- Software selectable individual time delay on/ automatic cutoff
- Capacity up 2.5 Amp. @ 24VDC each dual circuit
- EOL resistors supplied with module
- IBEW/USA quality crafted



## GENERAL

The SC-2 dual signal circuit module provides for the supervision and operation of two "2-wire"/Class "B" (Style "Y") field signal circuits. These two circuits are electrically independent and may be independently powered and programmed. The SC-2 module supervises all circuits individually for field wiring faults such as open circuits, short circuits, and positive/negative ground conditions. Each circuit is capable of powering compatible listed 24VDC polarized parallel signaling devices. Each signal circuit also provides access to software enabled timing formats. Each circuit has a yellow "trouble" LED indicator on the module front. A custom labeling area is provided adjacent to the switches and indicators for proper identification of field circuits. 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-2 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). In the activated condition (automatically thru system alarm software) the appropriate signal circuit(s) will reverse polarity and operate all associated signals. The appropriate operated signal circuit's yellow LED will operate to show circuit activation.

## DESCRIPTION

The SC-2 dual signal circuit module serves as the focal point of supervision and alarm activation for two independent signal circuits. All field mounted signals are connected to the SC-2 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. 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 circuits will not be effected. The SC-2 module will operate on an alarm condition automatically as directed by the system programming stored in the MPC-2000's CU-2 control module for a given alarm situation.

FARADAY MPC-2000 FIRE ALARM SYSTEM CONTROL UNIT - OPTION SC-2

## APPLICATION

- 1.) 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.
- 2.) The SC-2 module is a "non-powered" signal circuit hence signal operating power must be bussed into it from an AP-4 or AP-5 power supply module. This format allows for extended capacity (up to 2.5 Amp. @ 24VDC) and maximum flexibility in system power supply assignments.
- 3.) Shielded wire is not required on this system and in most cases will cause more problems than it prevents. Faraday alarm equipment is designed with built-in transient suppression networks thus negating the requirements of shielded cabling.
- 4.) 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.
- 5.) In addition to the basic features described in this data sheet, many other signal circuit features and functions are available through the use of system software. Consult the MPC-2000 owner's/programmer's manual for additional programming options.

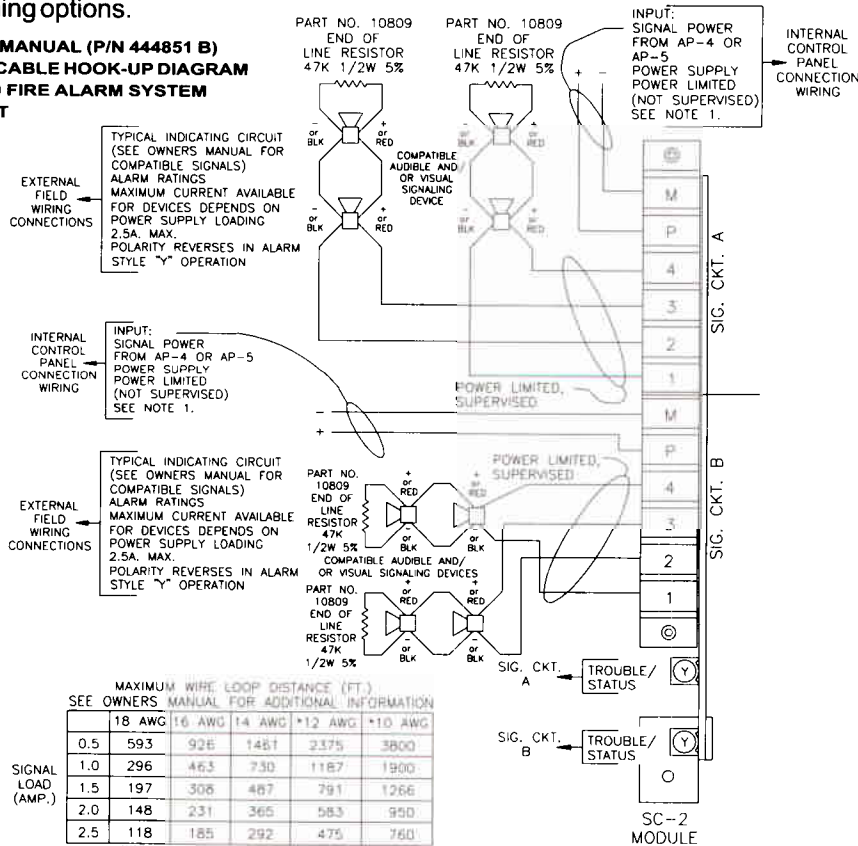
## TECHNICAL

- Power Provision:** Each circuit:  
Up to 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

## ORDERING

Model #	Part #	Description
SC-2	401314	Dual signal circuit module

**SEE OWNERS MANUAL (P/N 444851 B)  
FOR TYPICAL CABLE HOOK-UP DIAGRAM  
FOR MPC-2000 FIRE ALARM SYSTEM  
CONTROL UNIT**



**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.