

## FEATURES

- UL. Listed, File #S405, Standard #864 under MPC-2000 System Control Unit
- CSFM. Listed #7165-065:123 under the MPC-2000
- Provides master buffer circuitry for (1) module communication channel (UP to 27 modules)
- Provides slave buffer circuitry for connection to an additional BB-1 for extending (1) module communication channel (up to 27 additional modules)
- Built-in transient and RF protection for all modules connected to the BB-1 module
- Fully power limited
- IBEW./USA. Crafted



MADE IN USA



## GENERAL

The BB-1 buffer board module acts as an interface between the CU-2 central processing unit and the ZN, SC and AR series of modules in the MPC-2000 control unit. A minimum of (1) BB-1 modules is required for both the initiation (input) and signaling (output) inter-module communication channel loops in the MPC-2000. Each BB-1 module will buffer up to 27 modules within a given communication channel group. Multiple BB-1 modules may be paralleled on a given communication channel to obtain the maximum quantity of (52) ZN initiation modules and (48) SC and/or AR programmable signaling/auxiliary relay modules.

## DESCRIPTION

Each MPC-2000 fire alarm system control unit contains (3) communication channels as a means of communicating between the CU-2 main control unit and the other individually programmable modules contained in the control unit. These are:

**Input Channel** (Initiation) (ZN Series Modules)

**Output Channel** ("Programmable" Signaling)  
(SC, AR Series Modules)

**Miscellaneous Channel** ("System Functions")  
(MP, AP, BC, AR, SC, CT Series Modules)

Of these (3) inter-module communication channels the "input" and "output" channel modules must be buffered from the CU-2 main control unit via BB-1 buffer board module(s). Each BB-1 module will provide buffering for up to 27 appropriate system modules on one channel and two BB-1 modules can be linked to together to provide buffering put to the MPC-2000's maximum capabilities of 104 input zones (52) ZN modules) and 96 programmable output ckts. (48 SC and/or AR modules.

### Examples:

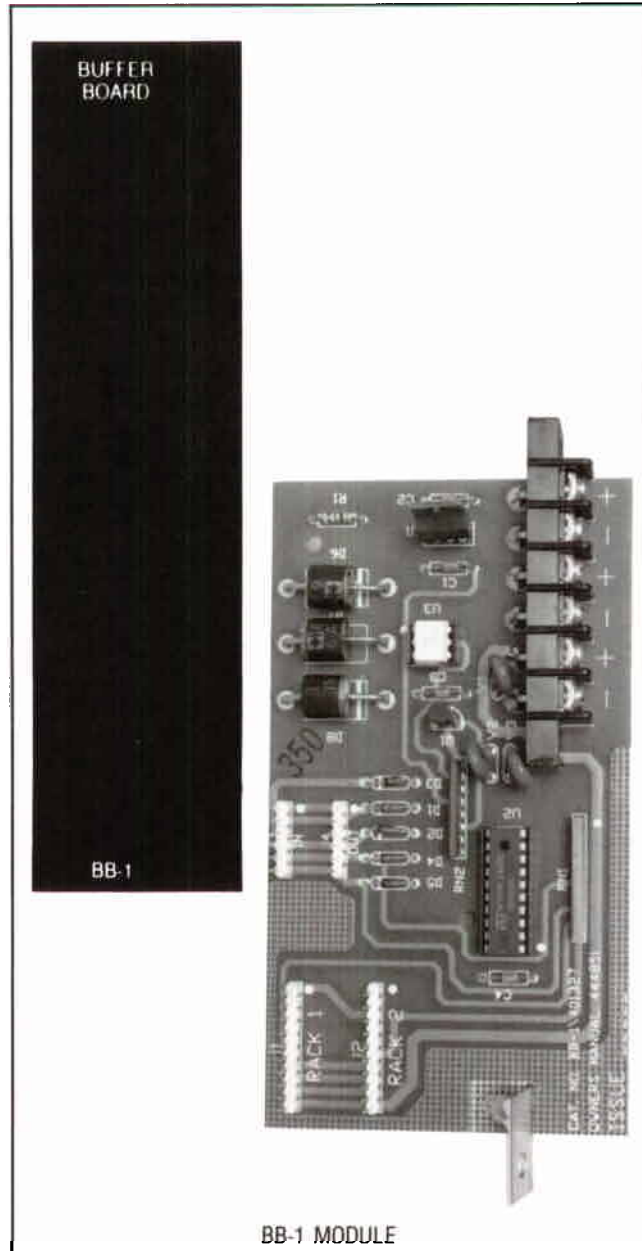
1 to 27 appropriate modules each channel requires (1) BB-1 module.

28 to 52 appropriate modules each channel requires (2) BB-1 modules.

The miscellaneous communication channel will accept up to (16) appropriate modules and requires no buffering.

## ORDERING INFORMATION

Model #	Part #	Description
BB-1	401327	Power/Control Buffer Module



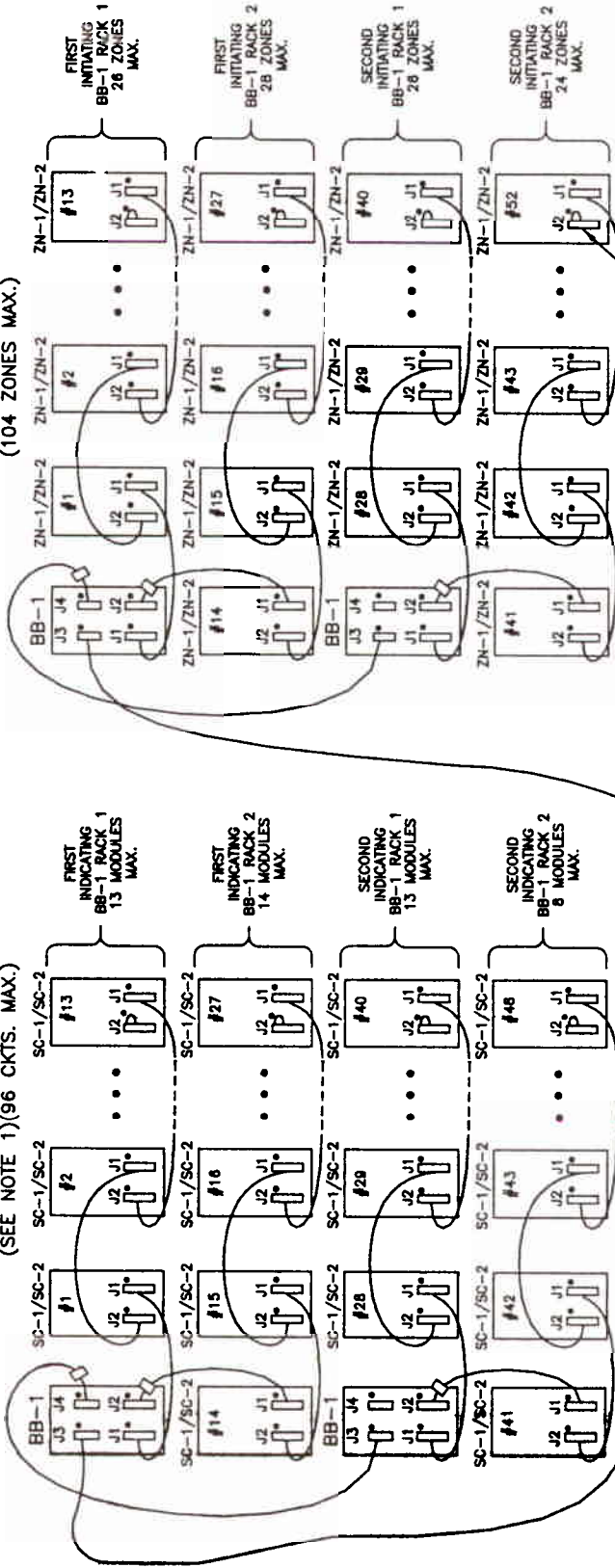
## TECHNICAL DATA

<b>Power Provision</b>	None
<b>Power Consumption</b>	Alarm-.006 Amp. @ 24 VDC (from MP-2 AP-1) Standby.006Amp.@24 VDC (from MP-2 AP-1)
<b>Space Provision</b>	None
<b>Space Consumption</b>	(1) Module space
<b>Channel Provision</b>	Buffering for up to 27 modules on the input channel or Buffering for up to 27 modules on the output channel
<b>Channel Consumption</b>	None

# TYPICAL CABLE HOOK-UP DIAGRAM FOR MPC-2000 FIRE ALARM SYSTEM CONTROL UNIT

CONVENTIONAL INDICATING CHANNEL MODULES  
(SEE NOTE 1)(96 CKTS. MAX.)

CONVENTIONAL INITIATING CHANNEL MODULES  
(104 ZONES MAX.)



TERMINATION PLUG (P/N 445016)  
REQUIRED AS SHOWN ON J2

NOTE: SEE HOOK-UP DIAGRAM FOR  
CU-2 MAIN CONTROL MODULE  
NOTE: SEE HOOK-UP DIAGRAM FOR THE PARALLEL CHANNEL

**CAUTION:**  
TRACER ON THE RIBBON CABLES  
MUST BE ALIGNED WITH THE DOT  
ON THE CIRCUIT BOARD.

**NOTE 1:**  
INDICATING CHANNEL MAY HAVE UP TO  
48 MODULES MAXIMUM.  
AR-1 AND AR-2 AUXILIARY RELAY  
MODULES MAY BE USED ON THE INDICATING  
CHANNEL AFTER ALL OF THE SC-1 AND/OR  
SC-2 INDICATING CIRCUIT MODULES AND/OR  
SC-3 INDICATING CIRCUIT MODULES AND/OR  
AR-3 AUXILIARY RELAY MODULES

- MISC. CHANNEL MODULES:
- MP-3 MAIN POWER SUPPLY
  - BC-2 BATTERY CHARGER
  - AP-4 REGULATED P.S.
  - AP-5 UNREGULATED P.S.
  - CT-1 CITY TELE
  - AR-1 AUX. RELAY
  - AR-2 AUX. RELAY
  - AR-3 AUX. RELAY DRIVER
  - SC-1 SUPV. SIG. CKT.
  - SC-2 SUPV. SIG. CKT.
  - SC-3 SUPV. SIG. CKT.
  - DI-1 D.A.C.T. INTERFACE
- (MP-3 PLUS A MAX. OF AN  
ADDITIONAL 16 MODULES)

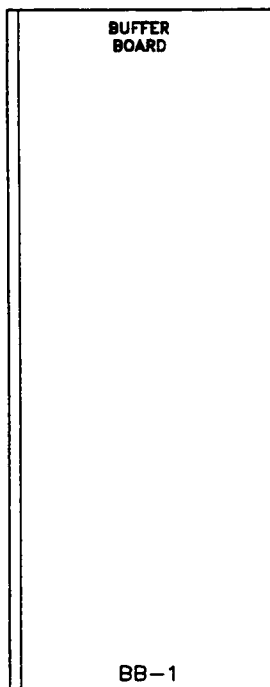
TERMINATION PLUG  
NOT REQUIRED

# TYPICAL WIRING FOR CAT. NO. BB-1 / PART NO. 401327 BUFFER BOARD

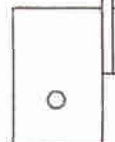
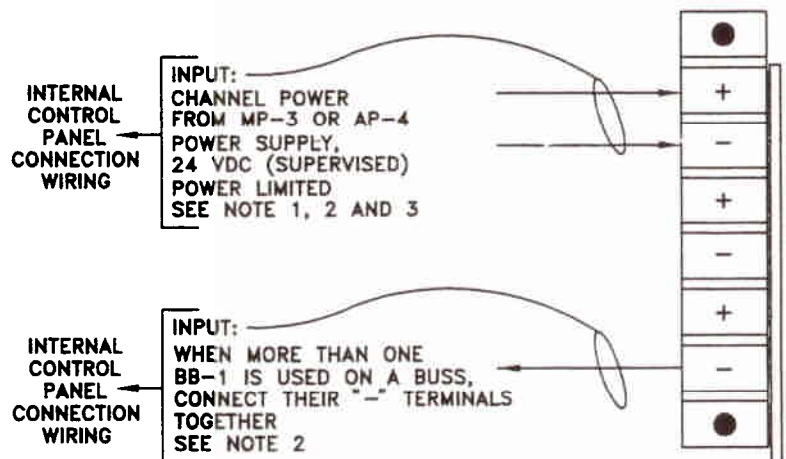
**MODULE POWER CONSUMPTION REQUIREMENTS:**  
 ALARM - .006 AMP.  
 NORMAL - .006 AMP.

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

**SPACE REQUIREMENTS:**  
 MODULE - 1  
 TRANSFORMER - 0



FRONT COVER LABEL



BB-1  
MODULE

**NOTES:**

- 1.) EACH BB-1 MUST HAVE ITS OWN, SEPARATE SET OF INPUT WIRES FROM THE POWER SUPPLY (NOT DAISY CHAINED).
- 2.) A MINIMUM WIRE SIZE OF 14 AWG. MUST BE USED FOR INTERNAL CONTROL PANEL CONNECTION WIRING.
- 3.) ADD MODULE POWER CONSUMPTION CURRENT FOR BB-1 MODULE PLUS ALL MODULES POWERED FROM THIS BB-1 MODULE FOR POWER SUPPLY CURRENT REQUIREMENTS. EACH BB-1 CAN POWER NOT MORE THAN 54 CIRCUITS (27 MODULES) (ZONES OR SIGNAL CIRCUITS AND/OR PROGRAMMABLE RELAYS)