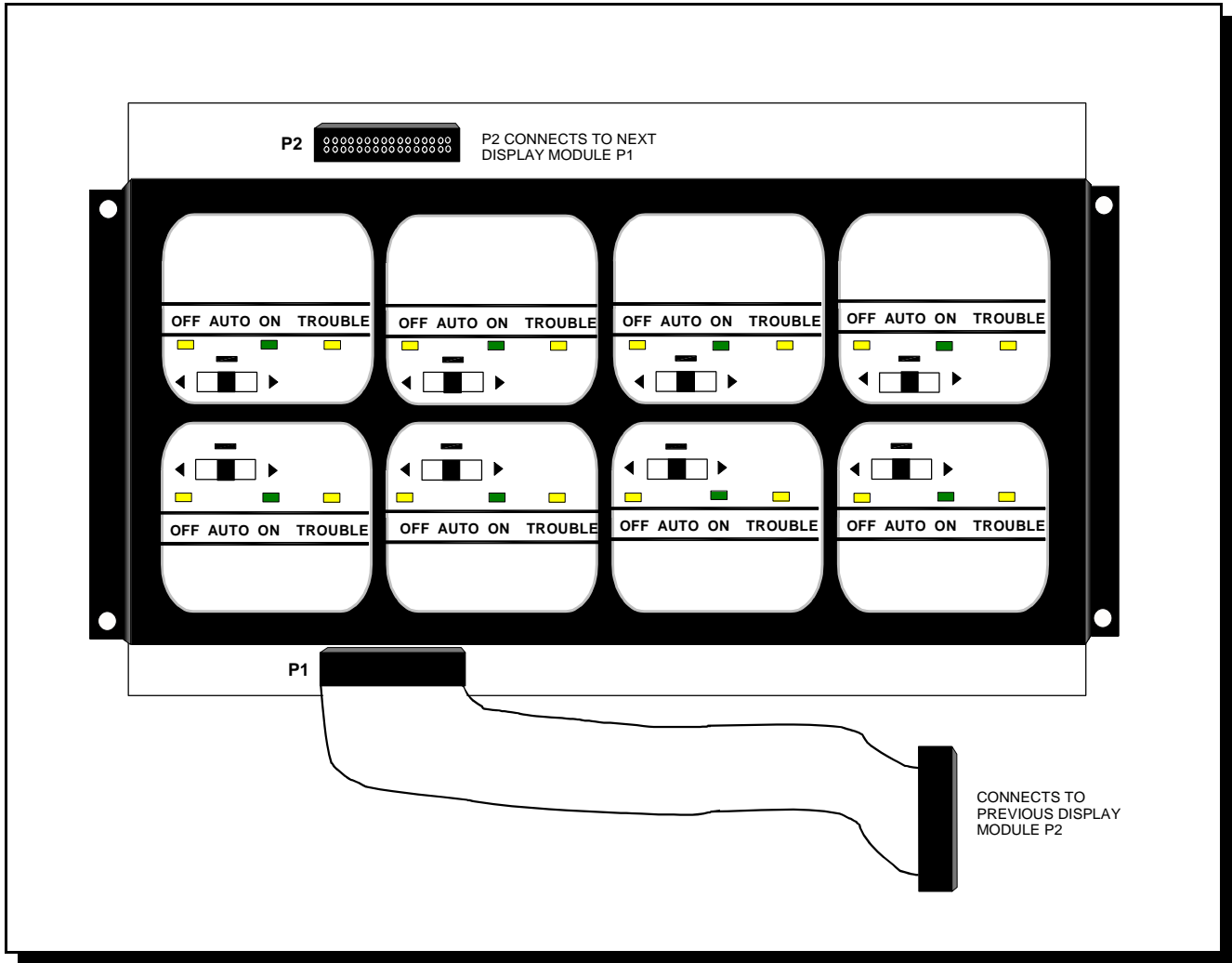![MIRCOM logo]

FDX-008 and FDX-008KI FAN DAMPER CONTROL DISPLAY MODULES

There are two models of the Fan Damper Control Display modules available. The **FDX-008** provides switch control and LED indication of 8 fan damper zones. The **FDX-008KI** provides switch control of 7 fan damper zones with the eighth zone activated by keyswitch. LED indication is provided for all 8 fan damper zones on the FDX-008KI. Both the FDX-008 and the FDX-008KI are used in conjunction with an FX-2000 or FX-2000H Fire Alarm Control Panel.

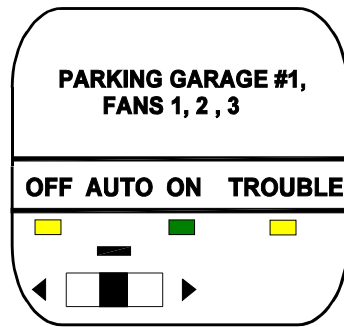### FDX-008 FAN DAMPER CONTROL DISPLAY MODULE

Fan Damper Operation:

The FDX-008 Fan Damper Control Display module has eight configurable output circuits, each with a three position switch. The FDX-008KI operates in the same manner as the FDX-008 except zone 8 is controlled by a remote keyswitch. Each switch has an ON and OFF position, plus an AUTO position. If the switch is placed in the AUTO position, the output will activate as programmed or configured. The output can be manually turned ON or OFF by placing the switch in the ON or OFF position, respectively.

Basically each switch can be configured to operate multiple fans or dampers. For each switch, there are 3 operations provided; outputs to turn ON, same outputs to turn OFF and inputs to bypass.

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An example of the most common use of the FDX-008 or FDX-008KI Fan Damper Control Display module is to operate exhaust fans and confirm fan operation (via monitor modules). See Figure 2 at the bottom of the page for a block diagram of fan and monitor set up.

Figure 1: Fan Damper
Control and Display

Example: As shown in Figure 1 above, Parking Garage #1 has 3 exhaust fans. The three position switch is configured to operate (to turn ON) fans 1, 2 and 3 in stairwell #1. The switch is set in the AUTO position. Upon activation (via alarm or some other programmed trigger) with the switch in AUTO, the 3 fans (1,2, and 3) in stairwell #1 are turned ON automatically. Monitor modules in the Parking Garage #1 detect that all 3 fans are operating, therefore the ON LED will illuminate steadily. If one of the fans did not turn ON (due to malfunction), the ON LED will flash. The TRBL (trouble) LED will illuminate steady amber based on feedback from the monitor module that one or more of the fans is not working.
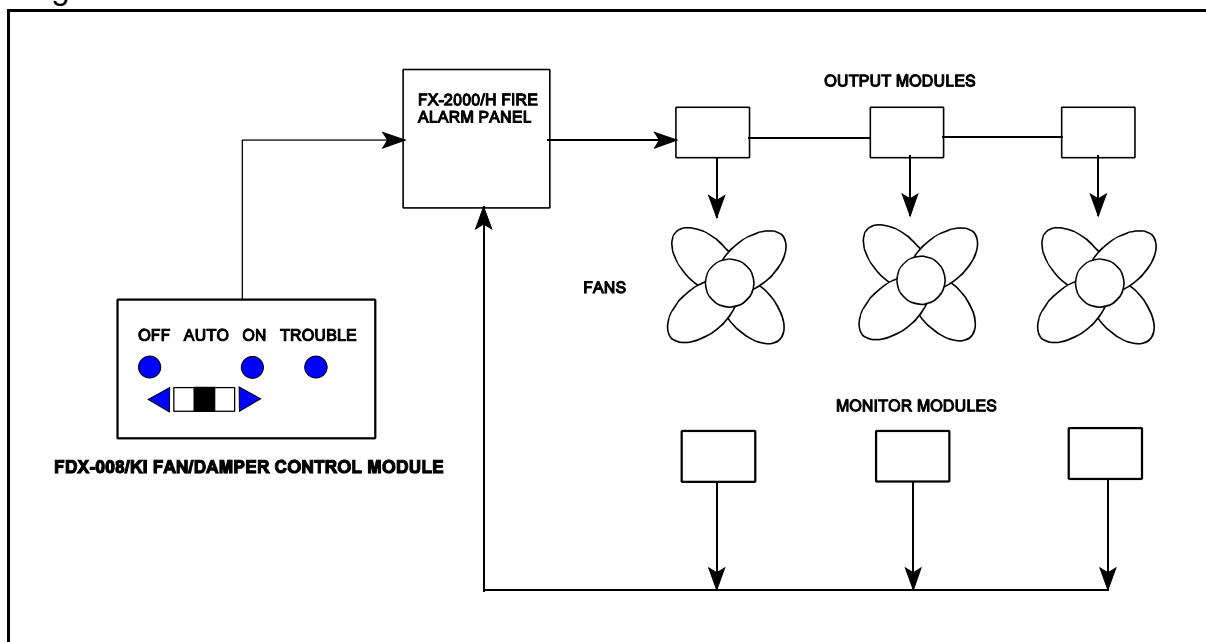
ON LED shows steady for all outputs operating and confirmed.

OFF LED shows steady for all outputs NOT operating and confirmed.

TRBL LED shows steady for one or more outputs NOT operating and confirmed.

NOTE: A bypass function always has priority, so that if a circuit is bypassed by moving the switch manually or by loop bypass (FX-2000 or FX-2000H Fire Alarm Panel), no other action will operate this switch other then again moving the switch manually or by un-bypassing the loop.
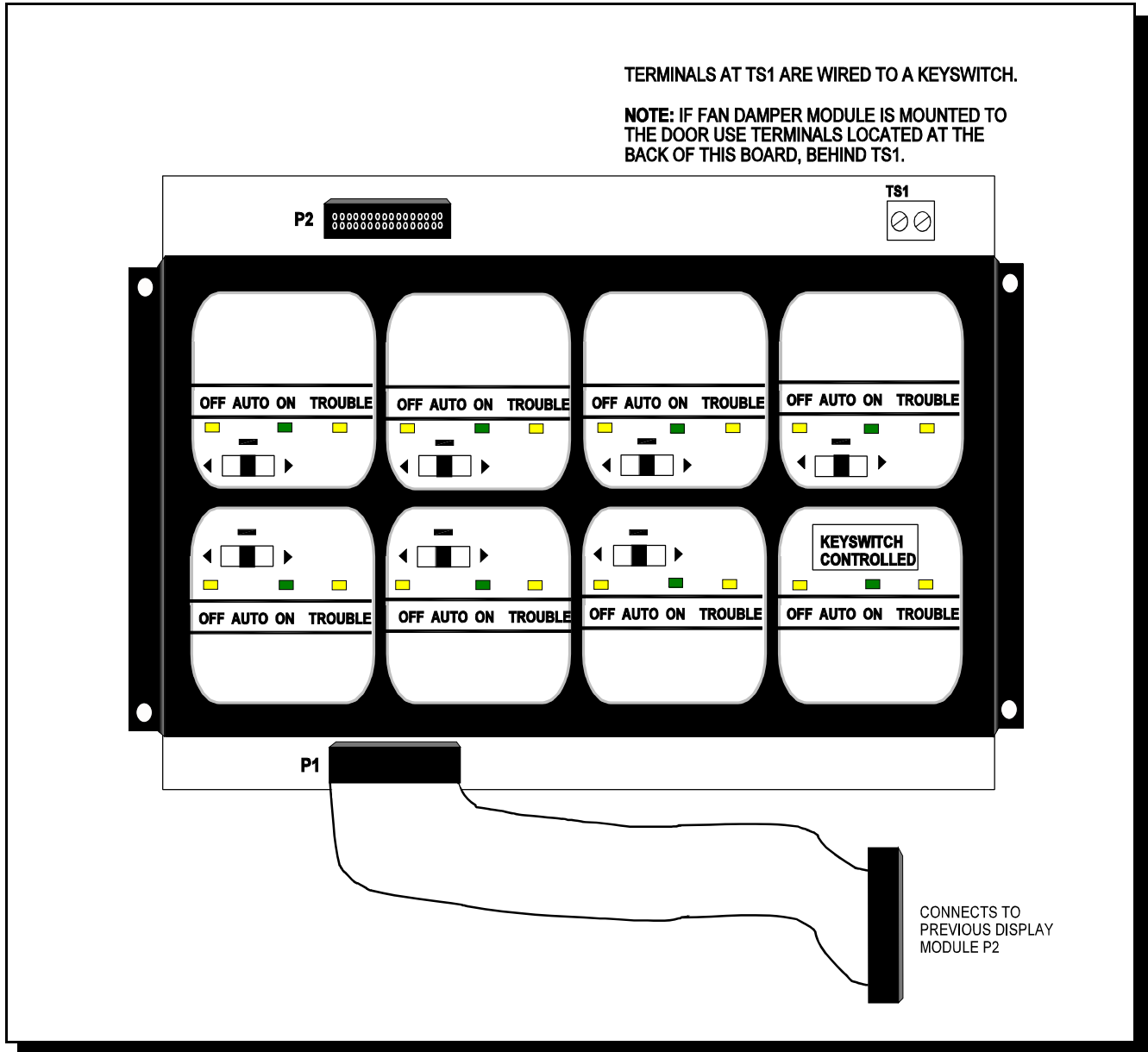
Figure 2: BLOCK DIAGRAM OF FAN AND MONITOR SET UP

Before mounting the **FDX-008KI** module, if a keyswitch is to be connected, wire the keyswitch to terminals at TS1 as shown in Figure 3. NOTE: There are also terminals located behind TS1 on the other side of the board for the convenience of wiring the keyswitch. The last fan damper zone in the bottom right position of the FDX-008KI is controlled by the keyswitch.

Mount the FDX-008 and FDX-008KI Fan Damper Control Display modules in any position on the front part of the FX-2000 chassis as shown in the FX-2000 Manual.

Figure 3: FDX-008KI FAN DAMPER CONTROL DISPLAY MODULE

Specifications & Features:

FDX-008 Fan Damper Control
C   24V DC nominal, range of 20 to 39V DC.
C   Interconnects via one ribbon cable to P2 of previous display module.
C   Provides 8 configurable output circuits or fan damper controls.
C   Standby: 15mA Max., Alarm (all LEDs ON): 35mA Max.

FDX-008KI Fan Damper Control with Keyswitch

C   24V DC nominal, range of 20 to 39V DC.
C   Interconnects via one ribbon cable to P2 of previous display module.
C   Provides 8 configurable output circuits or fan damper controls, 1 output controlled via keyswitch.
C   Standby: 15mA Max., Alarm (all LEDs ON): 35mA Max.